



Camp Fire
Central Puget Sound

ACTIVITY BOOK

Revised October 2019

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NOTE TO LEADERS AND FAMILIES

A NOTE ON THIS BOOK AND RECOGNITION ITEMS

This book replaces the Camp Fire Activity Bead Book. Earning beads for small projects has long been a part of Camp Fire. Since Camp Fire was founded in 1910, doing activities and earning beads as recognition item was an important part of the program. The Camp Fire Central Puget Sound council recognizes that beads were an important part of many people's Camp Fire experience, but also respects that the symbolic and decorative use of beads is deeply rooted in Native cultures. Therefore, we as a council have decided to move away from beads as a recognition item in our programming. Camp Fire Central Puget Sound will continue rewarding units of work with recognition items, but will be replacing the traditional beads with clothing studs of the same colors. Reference page 6 of this book for a visual of the studs.

THE FIVE TRAILS

The focus for Camp Fire's five program trails is to achieve outcomes that help youth light the fire within. All the activities in this book relate to one or more of these trails. Each trail is associated with specific program outcomes as follows:

Trail to Knowing Me helps youth learn leadership skills, relationship and communication skills, and focuses on increasing youth's self-knowledge. Activities in the *Trail to Knowing Me* focus on fitness, emotions, health, self-awareness, getting along with others, respecting differences, leadership, communication, conflict resolution, and safety.

Youth outcomes include:

- Reinforced motor skills and physical development
- Greater self-awareness
- Increased appreciation and respect for others
- Increased knowledge and application of governance process and teamwork
- Apply rules for fair play and conflict resolution
- Making program choices and planning sequentially

Trail to Family and Community strengthens each youth's place in the family and community and focuses on service-learning and citizenship. Activities in the *Trail to Family and Community* focus on genealogy, family activities, community, neighborhoods, maps, geography, stories, service-learning, cultures, and citizenship.

Youth outcomes include:

- Extended friendship circles
- Greater sense of belonging
- Strengthened family and community ties

Trail to Creativity stimulates youth's creativity and imagination through activities that involve the arts. Activities in the *Trail to Creativity* include visual and performing arts, hands-on projects, and wood working.

Youth outcomes include:

- Increased personal creativity

Trail to the Environment helps youth understand and appreciate the natural world. Activities in the *Trail to the Environment* focus on nature, conservation, natural resources, camping, hiking, pets, planting, and weather.

Youth outcomes include:

- Increased appreciation and understanding of nature

Trail to the Future focuses on developing mental and physical skills that will help young people become successful adults. Activities in *Trail to the Future* include science, learning new skills, technology, games, sports, and business.

Youth outcomes include:

- Increased competency in and appropriate application of basic learning skills

Feel free to contact the Camp Fire Central Puget Sound office with questions or comments about this activity book or any of its contents.

INTRODUCTION

THE CAMP FIRE TRAILS

Camp Fire activities are organized into five topic areas called trails.

The five trails are:

- Trail to Knowing Me
- Trail to Family and Community
- Trail to Creativity
- Trail to the Environment
- Trail to the Future

There are lots of fun activities on each of the trails. Together the trails lead you along a Camp Fire adventure that is filled with fun, learning, leadership and service.

Trail to Knowing Me is about relationships, communication and leadership skills that help you learn more about yourself.

Activities in the *Trail to Knowing Me* focus on fitness, healthy choices, emotions, self-awareness, health, getting along with others, respecting differences, communication, conflict resolution, leadership, and safety.

Trail to Family and Community strengthens your place in the family and community and focuses on service-learning and citizenship.

Activities in the *Trail to Family and Community* focus on topics like genealogy, family activities, community, neighborhoods, maps, geography, stories, service-learning, cultures and citizenship.

Trail to Creativity encourages your creativity and imagination through activities that involve the arts. Activities in the *Trail to Creativity* include visual and performing arts, hands-on projects and wood working.

Trail to the Environment helps you understand and appreciate the natural world. Activities in the *Trail to the Environment* focus on nature, conservation, natural resources, camping, hiking, pets and plants.

Trail to the Future focuses on developing your mental and physical skills. Activities in the *Trail to the Future* include topics such as science, learning new skills, technology, games, sports and business.

INTRODUCTION

GETTING STARTED

The activities in this book are organized within each of the five trails by interest areas. Look at the headings in each interest area to help you find activities that interest you. Read quickly through them and put a pencil mark by the activities that sound interesting. Choose what you are most interested in doing. There are more activities than you will ever hope to do.

You can do activities at home, at small group meetings, at camp, or at your after-school program. You can do them by yourself, with your family or neighbors, with your friends and with other members of Camp Fire. You will earn a clothing stud for each activity you complete. You might even find that you want to repeat an activity and earn another stud for it. This is allowed (up to five studs) as long as you do the activity differently each time.

Remember you must learn something new, give service or begin to form a good habit each time you earn a stud.

For example, if you are in the school choir and you sing in three concerts, you may receive three studs. In this case, you are learning different styles of music and three different songs. Another example is earning a stud when you learn to tie a square knot. Once you have learned this skill, you are repeating what you already know. So you do not earn another stud each time you tie a square knot. You can, however, earn a stud if you use a square knot to make something.

Each interest area has blank spaces for you to create your own activity to fulfill the stud requirement. The activity needs to be related to the interest area, and you must learn something new, give service or begin

to form a good habit. If you have a question about whether or not an activity qualifies for a stud, talk with your leader or an adult helping you.






When you complete the activity, talk to an adult who knows what you did. This may be your Camp Fire leader, an adult family member, a teacher, afterschool leader or other adult. Have that person initial and date the activity in this book. This shows that you have successfully completed what you set out to do.

When you finish a trail activity, you earn a stud. The stud stands for your accomplishment in one of the five Camp Fire trails. Each stud has a different color that symbolizes the trail it comes from.



Trail studs

INTRODUCTION

Trail		Symbolism
Knowing Me		Blue- represents self-knowledge and personal expression that leads to good citizenship at home, in the community, and in the world
Family and Community		Yellow- families and communities work together to reap the harvest of healthy relationships.
Creativity		Green- find expression for the creative force within each person.
Environment		Brown- learn and practice good stewardship of the earth and its resources.
Future		Red- representing the essential light of the future.

TRAIL TIPS

Here are some things to remember as you work on activities:

- Some are easy while some are hard. Some will require you to find instructions on how to do the activity. Some will require the use of a computer and the Internet. Some will take more time than others. Don't be afraid to challenge yourself!
- Do the activities to the best of your ability. If you need help, be sure to ask.
- Keep a record of what you do. Use this book to keep track of what you have accomplished and when you did it. There are two record pages at the end of each trail section for you to do this.
- When you finish a trail activity, ask yourself these questions:
 - Did I complete it to the best of my ability?
 - Did I learn something new, give service, or begin to form a good habit?

DISPLAYING YOUR STUDS

The studs you earn help you remember what you have learned. You can use them to decorate your award vest or another item of your choosing. Some suggested ways to display them are: form a border around your vest, spell out your name or group number, or arrange them in rows or columns. To apply your stud to cloth: simply place your stud where you want it on the top side of your garment, poke the 4 prongs through the fabric, and then bend the prongs down and inward so they lay flat against the back side of your fabric.

TRAIL TO KNOWING ME
FUN & GAMES

KM100 Learn and play two active group games.

KM101 Learn and play two new relay games.

KM102 Teach and lead games at two group meetings.

KM103 Participate in a game, leadership workshop, game demonstration, or exhibition.

KM104 Learn, play, and teach three singing games to younger children.

KM105 Learn, play, and teach two new clapping or hand motion games.

KM112 Learn and practice two new jump rope chants.

KM113 Create a jump rope routine and put it to music.

KM114 Make a piece of equipment to use in a game.

KM115 Participate in a play or field day at your school, in your community, or through Camp Fire.

KM 116 Help plan a play or field day. Help out during the event itself.

KM117 Learn about 3 different styles of kites, how they are constructed, and what makes them fly.

KM126 Play two games in the snow.

KM128 Go skiing or snowboarding.

KM106 Learn, play, and teach two new string games.

KM107 Learn, play and teach two new memory or chanting games.

KM108 Learn and play two new games using any kind of ball.

KM109 Create a new game and teach it to others. Decide on the rules of the game and write them down.

KM110 Learn two new techniques to jump rope by yourself.

KM111 Learn and practice two new techniques to jump rope with other children.

KM118 Construct and fly a kite.

KM119 Build two models from kits.

KM120 Learn two new Frisbee® tricks, catches, or throws.

KM121 Play a game of ultimate Frisbee®.

KM122 Attend a Frisbee® competition.

KM123 Put together two jigsaw puzzles of 500 pieces or more.

KM124 Put together a three dimensional puzzle.

KM125 Build a soapbox car, go-cart, or scooter. Make sure it has a simple steering device.

KM127 Sled, toboggan, inner tube, or snowshoe on three separate occasions.

KM129 Learn solitaire and teach it to another person.

KM130 Learn the rules and scoring for a board game such as chess, checkers, cribbage, or backgammon. Play several games.

KM131 Learn the rules and scoring for a card game requiring more than one person. Play the game.

KM132 Learn the rules and scoring and play bridge or mah jongg with one other person.

KM133 Teach a game of checkers to a younger child.

KM134 Create a game board and pieces that can be used for chess, checkers, or backgammon.

KM135 Learn and play a new video game. Set a goal to increase your score and improve your strategy. Teach someone else how to play.

KM136 Learn, play, and teach a two-person video game.

KM137 Learn, play, and teach two new word games.

KM138 Create your own activity having fun with a game.

KM139 Create your own activity having fun with a game.

KM140 Create your own activity having fun with a game.

KEEPING FIT

KM141 Create an exercise program appropriate for you and complete it regularly for at least a month.

KM142 Create a series of warm-up and cool-down exercises to use before and after exercise. Do the activities yourself.

KM143 Walk regularly for fitness for at least a month.

KM144 Learn the difference between aerobic and anaerobic exercises and tell the advantages of both.

KM145 Learn and explain why cardiovascular fitness is important.

KM146 Ride a bike for fitness regularly for a month.

KM147 Tour a gym or fitness facility and talk to a personal trainer.

KM148 Know the symptoms for some common sports injuries such as shin splints, pulled muscles, strains, and stress fractures. Demonstrate how to care for one of these injuries.

KM149 Participate in an aerobics class.

KM150 Participate in a yoga or pilates class.

KM151 Regularly practice a team sport of your choice.

KM152 Regularly practice an individual sport of your choice.

KM153 Learn about sports medicine. Interview an athletic trainer about what their job entails.

KM154 Research ways to maintain a healthy lifestyle on the internet or in books.

KM155 Create your own fitness activity.

KM156 Create your own fitness activity.

KM157 Create your own fitness activity.

WATER FUN

KM158 Go fishing with a group led by an adult. Learn how to cast and reel in. Observe and practice all safety rules.

KM159 Make a live bait container.

KM160 Learn and demonstrate how to tie on a hook, sinker, and bobber.

KM161 Make two types of artificial bait.

KM162 Learn the types of fish attracted to various bait. Bait a hook with three different kinds of bait.

KM163 Learn and explain the fishing laws in your area.

KM164 Learn the types of fish that are found in your area. Collect pictures of each.

KM165 Learn and demonstrate how to take a fish off a hook.

KM166 Learn and explain the safety rules for swimming and diving.

KM167 Place your face in the water. Open your eyes enough to identify an object underneath the water. Stoop down waist deep in water. Pick up several different small objects from the bottom.

KM168 Learn and practice two different floats. Hold each float for at least 10 seconds.

KM169 Jump into deep water wearing a personal flotation device (PFD). Stay afloat for 5 minutes.

KM170 Jump feet first off a dock, diving board, or the side of a pool into water that is at least waist deep. Do this several times.

KM171 Jump feet first off a dock, diving board, or the side of a pool into water that is at least to your armpits and swim to shallow water.

KM172 Jump or dive into deep water and swim to shallow water.

KM173 Swim 25 feet using only your legs.

KM174 Swim, float, or tread water, or do a combination of these for ten minutes.

KM175 Change body position from back to front to back again. Do this while sculling for 50 feet.

KM176 Swim one of the basic swimming strokes in good form for a distance of at least 50 feet.

KM177 Keep yourself afloat for ten minutes while fully dressed (pants, shirt, and sneakers over your swim suit). Then take off your pants, shirt, and sneakers in the water.

KM178 Learn and demonstrate two different types of dives using good form.

KM179 Learn and demonstrate the rescue of a person, without getting into the water yourself, using some object in-between you and the victim such as a board, tire, inner tube, or life jacket.

KM180 Plan a swimming party. Before it begins, review safety rules. There must be a qualified water safety instructor in charge of the swimming.

KM181 Participate in a water event such as a swim meet.

KM182 Learn and teach two water games.

KM183 Learn and demonstrate the correct use of a mask, snorkel, and fins.

KM184 Learn and demonstrate how to use scuba equipment.

KM185 Learn and demonstrate three synchronized swimming stunts.

KM186 Create and perform a synchronized swimming routine set to music.

KM187 Participate in a synchronized swimming exhibition.

KM188 Create your own water fun activity.

KM189 Create your own water fun activity

KM190 Create your own water fun activity.

LITTLE ONES TO CARE FOR

KM191 Observe someone caring for an infant. Do this for half a day or more and help out when you can. Describe to someone else what you learned about the care of infants.

KM192 Visit a preschool or care center. Watch different age groups of children. Talk to a preschool teacher or day care worker about the children and what they are learning.

KM193 Pick out several books that a toddler would enjoy and read these books to a small child.

KM194 Teach young children two games you enjoyed when you were their age. Play these games several times with the children.

KM195 Prepare a nutritious snack for a toddler. Help the child eat it.

KM196 Prepare, feed, and clean up a meal for a toddler. Have an adult help you prepare the meal.

KM197 Do two craft activities with a small child. Make sure the activities are ones that a child of that age can do. A parent of child care worker can help you pick craft activities.

KM198 Teach a small child his or her telephone number and street address. You'll have to repeat this many times to be sure the child can remember.

KM199 Entertain a small child for two to three hours. Play games, read stories, sing songs, or do a craft activity. Do this at least twice.

KM200 Make up a story for a young child. Include the child as one of the characters in the story. Tell your story.

KM201 Have the parent of a small child show you what changes they made in a living space to make it safe for children.

KM202 Help put an infant or small child to bed. Sing lullabies or read stories until the child is ready to fall asleep. Do this several times.

KM203 Have someone talk to you about toy safety. Find out what to look for in choosing safe toys for different age levels of children.

KM204 Take a babysitting course.

KM205 Start a babysitting file. In it, keep a list of questions to ask parents when you baby-sit for them. You should know important phone numbers and emergency procedures. Also include ideas for entertaining children such as games, songs, and crafts. Add to your file as you collect new ideas.

KM206 Volunteer to entertain young children of leaders at a Camp Fire event. Be prepared with games and craft activities.

KM207 Create your own activity to care for a little one.

KM208 Create your own activity to care for a little one.

KM209 Create your own activity to care for a little one.

SAFETY FIRST

KM210 Make a chart with emergency numbers. Include phone numbers for the police, fire department, family doctors, family members at work, cell phone numbers, a trusted neighbor, and poison centers. Post the chart by the telephone.

KM211 Meet with your family to talk about home emergencies. Show that you know what to do and whom to call in case of an emergency.

KM212 Discuss with an adult what you should do when you are home alone. Show how you would handle phone calls for your parents. Show what you would do if a stranger came to the door.

KM213 Meet with your family to plan escape routes in case of a fire. Practice your plan for escaping from a fire several times.

KM214 Meet with your family to plan what to do in case of an earthquake or a violent storm such as a tornado or hurricane. Practice seeking shelter in case of a storm several times.

KM215 Learn about fire hazards in the home. With an adult, inspect your home for these hazards. As a family, do something about the hazards you find.

KM216 Tell what materials you should use to put out different kinds of fires such as a grease fire or electrical fire. With the help of an adult, make sure these materials are available in your home.

KM217 Find out how to decide if an electrical appliance is no longer safe to use. Demonstrate how to safely use at least three electrical appliances.

KM218 Find out what poisonous substances are kept around your house. Look for poisonous houseplants, cleansers, pesticides, medicines, and other items. With the help of an adult, make sure these poisons are out of reach of small children.

KM219 Demonstrate how to call a poison control center to report a poisoning. Know what kind of information you should tell people at the center.

KM220 Do some research and find out what kinds of poisonings occur most frequently. Learn how these poisoning accidents can be prevented.

KM221 Read the labels on products you use around the home that are dangerous. Show that you understand how to safely use these products. Tell what you should do if someone swallowed one of these products or gets it on the skin, or in the eyes.

KM222 Learn what items should be stocked in a first aid kit. Explain what each item is for.

KM223 Put together a first aid kit for your family. Have an adult help you. Put the kit where all members of the family can easily use it.

KM224 Put together a first aid kit for a family trip. Have an adult help you. Think about the kinds of activities you'll be doing on the trip. Include first aid items that you might need for those activities.

KM225 Do some research on accident prevention and talk to your family about how you can avoid accidents.

KM226 Demonstrate how to care for minor injuries. Show the proper treatment for a scrape, a small cut, a splinter, and a burn.

KM227 Show how to take care of yourself in different kinds of weather. Learn what hypothermia is and how to avoid it. Explain the signs of heat exhaustion and heat stroke. Show how to take care for a sunburn or frostbite.

KM228 Describe the symptoms of shock. Demonstrate what to do for a person who is in shock.

KM229 Demonstrate how to help someone who is choking.

KM230 Demonstrate the correct method for giving mouth-to-mouth artificial respiration.

KM231 Take a first aid course.

KM232 Discuss with your family what precautions should be taken in your home before leaving town. Help take steps to keep your home and possessions safe.

KM233 Make a get-well card or poster for someone who is ill. Decorate it with pictures or drawings.

KM234 Learn how to use a thermometer to take a person's temperature.

KM235 Put together an activity box for a young child who is sick. Have an adult check your box for safety. Give your box to a sick child.

KM236 Help prepare a meal tray for someone sick and include a thoughtful card, a flower, or some other decoration to cheer up the patient.

KM237 Read a story or play a game to help entertain a person who is sick.

KM238 Create your own safety activity.

KM239 Create your own safety activity.

KM240 Create your own safety activity.

MONEY MATTERS

KM241 Open a savings account. Know the rate or interest your account earns. Figure out how much interest you will earn in a

year with the amount of money you have in the account right now.

KM242 Make a plan for saving a set amount of money weekly or monthly to deposit in a savings account. Follow your plan for a period of time agreed upon by you and an adult.

KM243 Find out what kinds of financial services are available at a full-service bank. You might ask to tour the bank used by your family or Camp Fire group.

KM244 Make a plan to save a set amount over a period of time to purchase something costing over \$10. Follow your plan and make your purchase.

KM245 Ask adults in your family to show you the systems they use to keep track of family income and expenditures.

KM246 Make up a personal budget. Show your sources of income and your regular expenses. If you think you need more money, talk to your family about ways you could earn this money.

KM247 Find out from adults in your family which credit cards are used to make family purchases. Ask an adult to explain to you what the finance charges are for using various credit cards.

KM248 Borrow money from a family member. Write out an agreement with that person on how you will pay it back. You may make a single payment or pay a little at a time. Pay interest (money paid to the lender for the privilege of borrowing) on what you borrowed.

KM249 Make something and price it to sell at a crafts fair. Include in your price the cost of your supplies and the time it took you to make it.

KM250 Put your money into travelers' checks for a trip you go on. Know how to cash a travelers' check. Explain what you should do if you lose the checks.

KM251 Learn about the stock market and play a stock market game.

KM252 Create your own money matters activity.

KM253 Create your own money matters activity.

KM254 Create your own money matters activity.

LOOK AT ME

KM255 Draw a chart showing all the immunizations a person your age should have. Check off the immunizations you have had. Make sure you get the ones you need and research the benefits of vaccines.

KM256 Draw a picture of a hairstyle and an outfit that you think will be worn 50 years from now.

KM257 Visit at least two of the following places where clothing is sold: a department store, a resale clothing store, a rummage sale, a vintage clothing store, a boutique, a thrift store, and an online catalog. Compare prices and kinds of merchandise.

KM258 Sew an article of clothing to wear. Ask an adult to help you.

KM259 Help an adult in your family shop for health and beauty aids. Compare prices and ask why certain items are bought.

KM260 Find natural substitutes for some of the health and beauty products your family uses, such as aloe on a burn rather than a medicated cream. Try some of the substitutes but be alert for allergies.

KM261 Brush and floss your teeth correctly. Do this regularly for a period of time.

KM262 Show different ways to protect your skin in different kinds of weather. Tell why it is important to avoid overexposure to sun and wind.

KM263 Learn about UV protection. Use the protection that is best for your skin.

KM264 Write out your daily routine. Start with when you wake up in the morning and end with when you go to bed.

KM265 Create your own activity to learn more about yourself.

KM266 Create your own activity to learn more about yourself.

KM267 Create your own activity to learn more about yourself.

LET'S EAT

KM268 Find the Food Guide Pyramid (or Food Plate) online at the U.S. Department of Agriculture website. Print or write down the correct number of daily servings for each food group.

KM269 Keep a food diary for one week. Write down everything you eat for meals and snacks. At the end of the week, go through your diary. Mark which food groups the foods you eat fall into.

KM270 Make a menu plan for your family for three days. Plan breakfast, lunch, and dinner. Make sure you include foods from each food group.

KM271 Follow your menu plan for one day. Help prepare a meal that you planned and have an adult help, if needed.

KM272 Read about the environmental impact of your food. How much water and carbon dioxide emissions does it take to produce the food you eat? Find out this information for a vegetable, a fruit, a meat product, and a dairy product.

KM273 Plan a vegetarian meal. Prepare your meal with the help of an adult, if needed.

KM274 Make three main dishes that use vegetables or meat substitutes instead of meat.

KM275 Make a drink using fresh fruit or fruit juices. Also make a frosted drink like a milkshake or smoothie. Use a blender if available.

KM276 Make two salads using vegetables, fruit, or pasta.

KM277 Make two salad dressings. Make one from a mix and one from scratch.

KM278 Cook vegetables three different ways. Boil, bake, fry, sauté, steam, or stir-fry different vegetables.

KM279 Cook two boiled meals of soup, beans, or vegetables.

KM280 Learn how to prepare a vegetable or fruit for freezing. Clean, cut, and pack the vegetable or fruit.

KM281 Visit the produce section of a grocery store. Pick out a fruit or vegetable you have never eaten before. Purchase, prepare it, and eat it.

KM282 Visit a farmers market and then purchase, prepare, and eat a piece of local produce.

KM283 Thaw and cook a food that you wrapped and froze.

KM284 Prepare hors d'oeuvres or appetizers. Serve them to your family or friends.

KM285 Make homemade jelly, jam, or preserves, or can a vegetable, fruit, pickles, or relish. Do this with the help of an adult.

KM286 Preserve something by dehydrating it. Use the sun, the oven, or a food dehydrator. Do this with an adult, if necessary.

KM287 Make two kinds of bread. Make one from a mix and one from scratch.

KM288 Make two kinds of brownies, cookies, cupcakes, or a cake. Make one from a mix and one from scratch.

KM289 Make homemade ice cream. Do this at least twice. Experiment with different ingredients to make different flavors.

KM290 Make two pies. Make one that you bake and one that you chill in the refrigerator.

KM291 Make two kinds of homemade candy.

KM292 Use a microwave oven to cook three different kinds of foods.

KM293 Experiment with different kinds of sandwich fillings. Share two that you like with someone else.

KM294 Make up your own recipe. Try it out. Decide how successful your experiment was.

KM295 Make your own lunch and take it to school or day camp. Use foods that will not spoil. Do this five times.

KM296 Plan and prepare two meals using leftovers.

KM297 Make your own breakfast. Do this for one week, using at least three different menus.

KM298 Make a food to give to someone as a gift. Store it securely and gift wrap it.

KM299 Enter a food item that you made into a competition.

KM300 Prepare a dish that meets the dietary needs of a person. This might be low fat, sugar-free, salt-free, gluten-free, or kosher.

KM301 Visit a specialty food shop and purchase one item to sample at home.

KM302 Prepare two foods from another country.

KM303 Visit a food processing plant such as a dairy, meat packing company, cannery, or frozen food plant. Find out how foods are processed.

KM304 Start a recipe collection. Add to it from various sources. Organize it in a way that you can easily find the recipes you need.

KM305 Make a grocery list. Follow it when you go to the store. Put the groceries away in their proper places when you get home. Do this several times.

KM306 Cook a meal with your Camp Fire friends that you plan, purchase, prepare, and eat together.

KM307 Bake a dessert and bring it to a Camp Fire meeting.

KM308 Visit a community garden and learn about how it operates.

KM309 Visit a pumpkin patch, purchase a pumpkin, and prepare a dish or dessert with it.

KM310 Visit an apple orchard, purchase some apples, and prepare a dish or dessert with them.

KM311 Prepare a dish or dessert using something you grew at home.

KM312 Create your own activity to learn more about food.

KM313 Create your own activity to learn more about food.

KM314 Create your own activity to learn more about food.

MY FAMILY AND ME

KM315 Keep your living space clean and neat. Put away your books and games. Hang up your clothes. Do this for two weeks.

KM316 Prepare an identification card for yourself. Include your emergency contacts, blood type, and any special medical problems. Carry it with you at all times.

KM317 Find out how fingerprints are taken. With your group, take your own fingerprints and identify which print pattern each of your fingers has (whorl, loop, arch, etc.).

KM318 Decide to do one family chore you have not done before. Do this chore regularly for one month without being told.

KM319 Plan an activity night where your family plays games together and talks about important things that are happening that week. You will be in charge of the night.

KM320 Create a chore chart for your family/household with the help of an adult, if needed.

KM321 Create your own activity to learn more about your family.

KM322 Create your own activity to learn more about your family.

KM323 Create your own activity to learn more about your family.

CAMP FIRE BUSINESS

KM324 Serve as the treasurer for your Camp Fire group for a minimum of one month.

KM325 Be in charge of refreshments for four meetings of your Camp Fire group.

KM326 Participate in the product sale for your Camp Fire council. Keep accurate records of the product you take and the money you receive for selling them.

KM327 Sell tickets to a Camp Fire event. Keep accurate records of the tickets you take and the money you receive for selling them.

KM328 Help make up a budget for a Camp Fire group outing. Show the expenses you expect and how you will get the money you need. After the outing, compare your actual expenses and income with the amounts budgeted.

KM329 Keep a record of your own expenses on a group trip. Stay within the amount that you have budgeted to spend.

KM330 Talk to a member of your council's finance committee. Ask for an explanation of this committee's job.

KM331 Participate in a group fundraiser other than the council's product sale. Use the money for a special purchase or a trip for your Camp Fire group.

KM332 Learn how to run a formal business meeting. Be in charge of at least four group meetings.

KM333 Demonstrate at a Camp Fire group meeting the proper way to introduce a guest, such as a speaker, to your group.

KM334 Write a letter to a business asking if your group may visit or take a tour. Write a thank-you note after the tour.

KM335 Make a calling chart for your Camp Fire group to notify members of important information quickly. Update your chart as needed.

KM336 Learn how to take minutes of a meeting. Do this more at least four group meetings.

KM337 Learn how to lead a discussion among your group members making a plan for a project. Lead a least four discussions.

KM338 With an adult or your group leader, plan an outing for your Camp Fire group.

KM339 Create your own activity to learn more about Camp Fire business practices.

KM340 Create your own activity to learn more about Camp Fire business practices.

KM341 Create your own activity to learn more about Camp Fire business practices.

MY NEIGHBORHOOD AND ME

KM342 Set aside a study area in your home. Keep all your school materials there. Make and follow a plan for one month to improve your study habits.

KM343 Show an improvement in your school grades. Set a goal to improve one grade and do it.

KM344 Make a map of your neighborhood.

KM345 Write and/or illustrate a story about a fun time you had in your neighborhood.

KM346 Research the history of your neighborhood and write up a fact sheet about it.

KM347 Put together a slide show, video, or scrapbook about a vacation you took. Share your show or book with your group. Tell them about the places you visited.

KM348 Research the indigenous peoples in the area you live. Record what you learn about their history and culture and how you can respect it.

KM349 Pretend you are a tour guide for your city. Make a guide book that includes attractions, places, and events visitors should check out.

KM350 Visit a local history museum or historical site.

KM351 Take a walking tour of your neighborhood.

KM352 Create your own activity to learn more about your neighborhood or city.

KM353 Create your own activity to learn more about your neighborhood or city.

KM354 Create your own activity to learn more about your neighborhood or city.

THE WORLD

KM355 Learn how to say five useful phrases in three different languages.

KM356 Learn a song in a different language.

KM357 Learn about the flags of several foreign countries. Show models or pictures of the flags to your group.

KM358 Collect postcards from your travels. Mount them in a scrapbook.

KM359 Collect stamps or coins from other countries. Organize them in a collection and learn the different denominations in the money of another country.

KM360 Visit the U.S.-Canadian border.

KM361 Find out what documents you would need to travel to another country. Learn how to apply for a passport.

KM362 Find out about a hero from another country. Read about this person, do internet research, or watch a movie about them.

KM363 Follow the news about an event in another country. Use television, radio, newspapers, the internet, and magazines. Share what you learned with your group.

KM364 Learn about UNICEF or another world service organization. Visit a local office of the organization, if possible.

KM365 Volunteer your time to do something for people in another country. Collect items for a project at your school, with your group, or with another community organization. Or help at a local international nonprofit event, or plan your own service project.

KM366 Visit the embassy or consul office of another country in your city.

KM367 Share your views on an important world issue. Give a talk, or write a story or play. Or, write a letter to a government official or a newspaper stating your views. Tell what you think about issues such as pollution of the ocean, war, droughts, etc.

KM368 Make and carry out a plan to do something about a world crisis such as hunger, access to education, women's rights, or climate change. Work through an organization which is taking action on this problem.

KM369 Research how actions you and others take locally can impact others across the globe. For instance, Americans drive climate change and smaller, less-developed countries are affected.

KM370 Create your own activity to learn more about the world.

KM371 Create your own activity to learn more about the world.

KM371 Create your own activity to learn more about the world.

TRAIL TO KNOWING ME ACTIVITY RECORD

[illegible]

TRAIL TO KNOWING ME ACTIVITY RECORD

[illegible]

TRAIL TO FAMILY AND COMMUNITY**MY FAMILY**

FC100 Draw pictures of people in your family. Write on each picture what that person means to you. Share these with family members.

FC101 Draw and cut out a paper doll that looks like each member of your family. Color or paint your paper dolls and make clothes for them.

FC102 Write a poem. Express how you feel about your family in your poem. Share it with your family.

FC103 Make a photo album or collage to acknowledge the achievements of your family members.

FC104 Give a gift you make yourself. Do this for a family member on a special occasion.

FC105 Do something special for a family member to show your appreciation. Make a gift. Write a poem. Offer to take over a chore. Or, do something else that says, "Thank you for all you've done for me."

FC106 Make and decorate a bulletin board. Put it in a place where the family can use it as a message center.

FC107 Work with your family to save money for a special purchase or a trip together. Decide how much you will save and carry out your plan.

FC108 Make a calendar or book of family birthdays and special events. Decorate it with drawings or photographs.

FC109 Design a family shield or crest that tells something about your family. Make up your own symbols if you wish. Use your shield on the cover of a card or a thank-you note. Tell your family what the shield means.

FC110 Make a "good deed" coupon book for your family. Each coupon is good for one task completed by you. Carry out tasks cheerfully when family members redeem their coupons.

FC111 Help to plan and carry out a special family event. It could be a reunion, a holiday celebration, or a birthday party.

FC112 Make a list of things you can do right now to be a good citizen. Choose one thing from your list and do it regularly.

FC113 Talk to an older adult in your family. Find out about life when they were young. Record this person's stories in a book or on tape. Share them with the rest of your family.

FC114 Meet as a family. Agree on a list of family rules that affect you. Try your best to obey these rules for one month without being told. Meet with your family again after the month. Decide if any rules should be changed.

FC115 Read the newspaper or a news website on the internet or watch the news on television every day for one week. Talk about the news with your family members. Find out their opinions on current events.

FC116 Think about the rights you believe children should have. Write your personal Bill of Rights describing these. Share them with your family. Find out how many of these rights are now included in laws.

FC117 Trace your family heritage for three generations. Talk to a parent, grandparent, or other adult in your family. Draw a family tree to show what you learned.

FC118 Learn about the lives of family members. Find out if any of your relatives have run for public office or campaigned for an important cause.

FC119 Create an activity to learn more about your family.

FC120 Create an activity to learn more about your family.

FC121 Create an activity to learn more about your family.

HOME HELPER

FC122 Make a list of household duties you are expected to do. Make a schedule of when you'll do these duties. Follow your schedule for a period of time agreed upon by you and an adult.

FC123 Learn how to separate clothes for washing by color, weight, and type of material. Sort the family laundry several times.

FC124 Learn how to operate a washing machine and a dryer. Have an adult show you how. Do at least four loads of clothes. Use different temperature settings on the washer and the dryer for different kinds of fabrics.

FC125 Hand wash three items of clothing that require special care.

FC126 Iron two items of clothing requiring different temperature settings on the iron. Read labels for any special instructions.

FC127 Fold the household laundry after it has been washed and dried. Put away in proper places. Do this at least three times.

FC128 Learn how to operate a vacuum cleaner. Vacuum a room three times. Show how to empty the vacuum cleaner.

FC129 Clean a linoleum or tile floor. Do this three times.

FC130 Set the table for family meals. Put the silverware, glasses, dishes, and napkins in their correct positions. Do this for one week.

FC131 Load a dishwasher and operate it. Unload it and put dishes away in their proper places. Do this five times.

FC132 Wash by hand, dry, and put away dishes after three family meals.

FC133 Clean out a refrigerator or freezer, defrosting it if necessary.

FC134 Empty all the garbage and trash containers in your home. Do this regularly for a period of time agreed upon by you and an adult.

FC135 Show that you know the different kinds of products to use to clean different surfaces. Tell what you would use to clean wood, glass, chrome, and tile or porcelain.

FC136 Learn how to change light bulbs. Learn about wattage and warm vs. cool lights.

FC137 Read a book on household tips and tricks. Use five of these tips.

FC138 Help prepare your home for a new season. Help an adult to do one of the following: put of storm windows or screens, change the furnace or air conditioner filters, weather strip windows, clean gutters, or another task of your choosing.

FC139 Clean the inside and outside of your family's car. Do this several times.

FC140 Go to the store with an adult from your household and shop for cleaning supplies and home repair supplies.

FC141 Help an adult family member with these car maintenance tasks: check the oil, pump gas, change the air filter, and check the tire pressure. Add oil or air if necessary.

FC142 Add windshield washer fluid in a car.

FC143 Replace windshield wipers on a car.

FC144 Help an adult change the oil in a car.

FC145 Help an adult change a tire on a car.

FC146 With an adult, learn how to jump start a car.

FC147 Take care of the family pet. Feed and water your pet. Clean up after your pet. Do this for a period of time agreed upon by you and your family.

FC148 Clear the walks or driveway in front of your house of snow and ice. Do this several times.

FC149 Create an activity to learn more about helping around the house.

FC150 Create an activity to learn more about helping around the house.

FC151 Create an activity to learn more about helping around the house.

FIX-UP TIME

FC152 Help an adult paint, refinish, or upholster a piece of furniture.

FC153 Help an adult paint or wallpaper the walls of a room.

FC154 Help an adult with a home repair task. You could help fix a leaky faucet, re-wire a lamp, or help with another repair.

FC155 Help an adult repair a piece of furniture or a small appliance.

FC156 Learn how to safely operate a power tool. Do this with an adult.

FC157 Show how to use properly five of these hand tools: hammer, screwdriver,

wrench, rubber mallet, handsaw, pliers, vice, brace and bit, and drill. Tell when you would use each one.

FC158 Visit a lumberyard or a hardware store. Choose and purchase an item to help you to complete a home repair or decorating task.

FC159 Create an activity to learn more about fixing items around the house.

FC160 Create an activity to learn more about fixing items around the house.

FC161 Create an activity to learn more about fixing items around the house.

MONEY MATTERS

FC162 Work as a salesperson at a booth for a school, religious group, or neighborhood event. Take money, make change, and offer courteous service.

FC163 Participate in a fundraiser for your school, place of worship, or a community group. Do your share to meet a fundraising goal.

FC164 Make a plan to give some of your income to a local charity. Follow your plan for at least one month.

FC165 Draw up a contract with your family to describe what services you will provide at home in return for what payment.

FC166 Find out what kinds of insurance your family has.

FC167 Create an activity to learn more about managing money.

FC168 Create an activity to learn more about managing money.

FC169 Create an activity to learn more about managing money.

SMART SHOPPER

FC170 Find out how much money your family spends on food in one month. Help figure out ways your family can lower its food costs.

FC171 Find out how much money your family spends on utilities-gas, electricity, water, garbage, and recycling- in one month. Meet with family members to figure out ways that your family can lower utility costs.

FC172 Look at coupons before going to a store and save coupons you think you may use. Go to a store and use a coupon at checkout.

FC173 Create an activity to learn more about smart shopping.

FC174 Create an activity to learn more about smart shopping.

FC175 Create an activity to learn more about smart shopping.

CAMP FIRE AND ME

FC176 Host a Camp Fire meeting at your home. Introduce your family to your Camp Fire friends.

FC177 Hold an office in your group. Serve in the office for four meetings.

FC178 Be in charge of a special opening and closing ceremony for a Camp Fire group meeting.

FC179 Do something for your leader to show your appreciation. Make a gift. Write a poem. Or do something else to say "Thank you for all your help."

FC180 Learn the proper way to do a flag ceremony. Do a flag ceremony at a Camp Fire meeting or camp.

FC181 Write a story, poem, or news article about something you had fun doing in

Camp Fire. Send your article to your local council.

FC182 Make a display that tells about Camp Fire. Put up your display in a public place. Your school, a nearby library, or a business may be good display places.

FC183 Learn the location of your Camp Fire council office. Visit and meet the people who work there. Find out how they help your group.

FC184 Make a list of some people you have helped your group. Write letters to thank them. Or, invite them to a special event to thank them.

FC185 Create and present a skit to your family and friends.

FC186 Help during a district or council Camp Fire event.

FC187 Read some of the history of Camp Fire in Wohelo. Your council should have a copy. Tell your group what you learned.

FC188 Interview someone who has been a longtime member of Camp Fire. Tell your group what you learned about their experience and how Camp Fire has changed over the years.

FC189 Write a letter to the board of directors of your council. Tell them what Camp Fire means to you.

FC190 Present a skit or play about good citizenship to other Camp Fire members.

FC191 Explore the national Camp Fire website and your council's website. Report to an adult about something new you learned.

FC192 Create an activity to learn more about Camp Fire.

FC193 Create an activity to learn more about Camp Fire.

FC194 Create an activity to learn more about Camp Fire.

MY NEIGHBORHOOD AND MY SCHOOL

FC195 Help your teacher for a week. You could water plants, decorate bulletin boards, or feed classroom pets.

FC196 Make friends with a new person at your school or in your neighborhood. Introduce this person to others. Share what you know about your school or neighborhood. Invite your new friend to a Camp Fire meeting.

FC197 Attend a block party or a neighborhood street celebration. Help out during the event.

FC198 Draw a map of your neighborhood. Mark all the places that you think are most

interesting. Show your map to a newcomer or visitor to your neighborhood.

FC199 Help an organization which serves your school or neighborhood. This might be the PTA or a neighborhood association.

FC200 Pick up litter on your school grounds or around your neighborhood for one week.

FC201 Serve on the school traffic patrol, work as an office helper, or aid the library of your school for at least a week.

FC202 Help keep your neighborhood neat. Volunteer to do yard work for your family. Or, help a neighbor with yard work. Do this for one month.

FC203 Write articles for a classroom or school newsletter. Or, volunteer to help make announcements at school.

FC204 Help clean graffiti off school property or a neighborhood wall.

FC205 Ask a teacher at school how you can become a tutor. Be a tutor for at least one month.

FC206 Help plan and carry out an all-school event. It might be a carnival, hobby show, exhibit, or fund raiser.

FC207 Find out what your friends or classmates think about an important issue. Take an opinion poll on a topic. Include at least 10 people in your poll and think of a way to show the results in a chart or graph.

FC208 Create an activity to learn more about your neighborhood and your school.

FC209 Create an activity to learn more about your neighborhood and your school.

FC210 Create an activity to learn more about your neighborhood and your school.

MY COMMUNITY

FC211 Help beautify your community. Plant trees or flowers in a public place. Or, clean up a vacant lot.

FC212 Find out about interesting places to visit in your community. Visit one place you have never been before.

FC213 Volunteer your time to do something for senior citizens in your community. Help deliver hot meals, visit someone confined to a bed, run errands for an elder in your neighborhood, or plan your own service project.

FC214 Visit a place which provides public services. You could tour a police or fire station, a health clinic or the employment office. Find out what these services are. Prepare a report or presentation about them.

FC215 Learn how your community began. Find out how it was founded and how it got its name. What indigenous people lived

there? Tell someone the story of your community in words and pictures.

FC216 Go someplace in your community using public transportation. Show that you know how to read a schedule and pay fares.

FC217 Discover which places in your community got their names from indigenous words. Learn which language these words came from. Learn the original meaning of the words.

FC218 Make a map of your community. Show where there are free things in your community for children to do. Display your map at a library or at school.

FC219 Learn about another neighborhood in your community. Exchange visits with a Camp Fire group from this neighborhood.

FC220 Enter a bike-a-thon, walk-a-thon, or similar event in your community to raise money for a special cause.

FC221 Participate in a community event such as a parade, a festival, or a holiday or historical celebration.

FC222 Take a visitor to an interesting place in your community. Share what you know about the place.

FC223 Find out what different cultural groups and organizations are in your area. Have a representative of one of these groups visit your group meeting. Or, attend a cultural festival.

FC224 Learn about the lives of people who once lived in your area. Talk to a local historian or visit a museum or historical display.

FC225 Volunteer to help at your local library. You might read to young children, help shelve books, repair damaged books, or plan your own service project.

FC226 Attend a city or town government meeting.

FC227 Write a letter to an outstanding person in your community. Thank this person for the work they have done.

FC228 Visit a community organization that provides services to immigrants to this country or people who have just moved into the community.

FC229 Help choose items to be put in a time capsule. The items should show what life is like in your community. Have a ceremony to bury the time capsule.

FC230 Visit an office of a citizens' organization like the League of Women Voters or the Citizen's Climate Lobby. Or, have a person from that organization come talk to you. Find out what they do and how you could help.

FC231 Volunteer your time to do something for people with special needs in your community. For example: read books or write letters for someone with limited vision or help at a Special Olympics event.

FC232 Invite a public official in your community to a Camp Fire group meeting. Learn about what this person does for your community. Find out about jobs in public service.

FC233 Volunteer to help with a community fund-raising project, stuffing envelopes or putting up posters. Make your own financial contribution.

FC234 Meet with First Nation peoples or another cultural group that lives in your community. Learn about their past and their lives today.

FC235 Write letters to people in your community or country government. Share your ideas about what children in your community need.

FC236 Find out how people register to vote. Find out the number of the ward, precinct, or district where you live. Learn where people in your neighborhood go to vote.

FC237 Visit the courthouse and watch a court session. Ask someone to explain to you how the judicial system works. Find out how a person is selected for jury duty.

FC238 Interview a person who gives a lot of time or money to your community. Find out why this person is involved and how.

FC239 Volunteer your time to do something for other children in your community. Teach games to children at a day care center or plan your own service project.

FC240 Find out what's being done in your community about an issue you think is important. Learn who is working to solve problems and how you can help.

FC241 Go with an adult to vote in an election. Help them do research on the candidates before going to the polls.

FC242 Create an activity to learn more about your community.

FC243 Create an activity to learn more about your community.

FC244 Create an activity to learn more about your community.

MY STATE AND MY COUNTRY

FC245 Visit a place important to the history of your state or the nation. Collect brochures telling about the place you visit and present about it to your Camp Fire group.

FC246 Draw a map of your state. Show points of interest on it. Show your map to someone who is new to or is visiting your state.

FC247 Draw a picture of your state flag. Tell what the colors, designs, and symbols on the flag mean.

FC248 Find out who represents you in your state government. Write a letter or make a phone call to each of them. State your ideas on an issue you think is important.

FC249 Find out who represents you in the U.S. House of Representatives. Write a letter or make a phone call to your representative. State your ideas on an issue you think is important.

FC250 Find out who represents you in the U.S. Senate. Write a letter or make a phone call to each of them. State your ideas on an issue you think is important.

FC251 Find out who the governor of your state is. Write or make a phone call to them about an issue that you think is important.

FC252 Write or make a phone call to the office of the President of the United States. State your opinion on an issue that you think is important.

FC253 Take a tour of your state capitol building or the nation's capitol building.

FC254 Explain the meaning behind five symbols used by the United States on its flag, in its seal, or on currency.

FC255 Using the internet, contact a tourist information center. Or visit a center. Get brochures about places to visit in your state. Organize the brochures to use when planning a trip.

FC256 Read a book about the history of your state or the nation.

FC257 Learn when your state was admitted to the Union. Find out the names of your state bird, flower, and tree. Learn your state motto and song. Some states have nicknames. Find out if yours does.

FC258 Watch a national news show or read the news for a week. Keep track of an important national event. Share what you learn with your group.

FC259 Visit the campaign office of a public official. Find out what the requirements are to run for public office.

FC260 Follow the election campaign of a state or national candidate. Collect this person's campaign information and read/watch news stories about this person. Find out this person's opinion on issues that affect young people.

FC261 Visit a state or federal office in your area. Find out what type of government business takes place there.

FC262 Read an important historical document of our nation. Read the Preamble to the Constitution, the Declaration of

Independence, the Bill of Rights, an important First Nation treaty, or the Emancipation Proclamation. Be able to tell in your own words what this document means.

FC263 Create an activity to learn more about your state and your country.

FC264 Create an activity to learn more about your state and your country.

FC265 Create an activity to learn more about your state and your country.

TRAIL TO CREATIVITY**PICTURES AND PAINTS**

TC100 Make a drawing for a repeat design, such as snowflakes, symbols, or flowers. Use your repeat designs as a border for stationery.

TC101 Express different feelings and emotions with color without trying to make a picture. Use brush strokes and let your colors blend together in ways that interest you. Express happiness, anger, laughter, fear, or any other feeling you may have.

TC102 Create a message using symbols.

TC103 Create a picture using colored sand or salt.

TC104 Finger paint or use a sponge instead of a brush.

TC105 Make several designs with splatter paint using your favorite colors. Or, do several blow paintings using ink, watercolors, or both.

TC106 Make a chalk drawing using one of the following methods: chalk on rough or wet paper, or chalk dipped in buttermilk.

TC107 Decorate an object with paint using a detailed design.

TC108 Draw or paint a landscape, seascape, building, or a street scene.

TC109 Make sun prints on blueprint paper. Experiment with different objects to make interesting designs.

TC110 Make a crayon rubbing from a sculpture, piece of tile, a leaf, or other textured surface.

TC111 Make several ink sketches on moistened paper.

TC112 Make sketches of scenes from your life using crayons, watercolors, pencil, charcoal, or chalk pastel.

TC113 Design and make a poster or mural for a Camp Fire or school event.

TC114 Make or decorate one or more of these: a washable cover for a book, a bound recipe collection, labels for several containers, or a family bulletin board.

TC115 Make a holiday decoration such as an ornament, an egg, or a banner.

TC116 Blow out the contents of an egg. Decorate the shells using paint, crayon, glue and glitter, or designs cut from paper. Display your decorated eggs.

TC117 Decorate a piece of kitchen equipment, such as a knife rack, canister set, breadbox, or a tray. Use paints, varnish, decoupage, or stencils.

TC118 Draw and cut out a paper doll that looks like you. Color or paint your paper doll and make some clothes for it.

TC119 Make a map of an area you know well and color it. You could make a map of your neighborhood or a campsite.

TC120 Draw and paint a familiar landscape such as your home, school, park, or camp. Use acrylic, oil, or tempera paints.

TC121 Decorate a window. Use tempera paint with a pinch of detergent, or hang up colored tissue designs. Remove decorations and clean the window at the agreed upon time.

TC122 Make a picture book for a child. Use your own drawings.

TC123 Help make a place in your home for a family art gallery. Display your family's creative efforts.

TC124 Paint or decorate an article for outdoor use. This might be a birdhouse, birdbath, birdfeeder, or a lawn sign.

TC125 Watch a sunrise, a sunset, or a gathering storm. Draw or paint it in a way that expresses your feelings about what you see.

TC126 Create your own picture and paints activity.

TC127 Create your own picture and paints activity.

TC128 Create your own picture and paints activity.

PHOTOGRAPHY

TC129 Demonstrate how to hold a camera, focus, judge distance, and take a photograph.

TC130 Learn how to take photographs using different lighting. Take at least one photograph in normal sunlight, one under cloudy conditions, and one inside.

TC131 Take a successful long exposure photograph.

TC132 Visit a photography shop or photographer's darkroom with an adult or your Camp Fire group. Learn how photographs are developed.

TC133 Learn to develop your own photographs. Start a photo album in which you keep picture you have developed.

TC134 Classify and index a collection of family photographs.

TC135 Learn about and use an instant camera.

TC136 Learn about digital cameras. Take pictures using one. Print the pictures on photo paper.

TC137 Send a picture that you took with a digital camera via e-mail to a friend.

TC138 Make a gift for someone using the digital pictures you took.

TC139 Make a box or pinhole camera and take a picture with it.

TC140 Take a picture and learn to print it on a surface such as cloth, glass, wood, or metal.

TC141 Create your own activity using photography.

TC142 Create your own activity using photography.

TC143 Create your own activity using photography.

VIDEO

TC144 Learn about video cameras and how they have changed over the years.

TC145 Learn how to use, clean, and care for a video camera.

TC146 Use a video camera to document a day in your life.

TC147 Use a video camera to document a special occasion such as a wedding or birthday party.

TC148 Make a gift for someone using a video camera.

TC149 Use an editing software such as Windows Movie Maker or iMovie to create a video edit with music.

TC150 Make a video of your Camp Fire group and e-mail it to the Camp Fire office.

TC151 Create your own activity using video.

TC152 Create your own activity using video.

TC153 Create your own activity using video.

FIBER FUN

TC154 Make decorations for a party by wrapping string dipped in paste or liquid starch around balloons.

TC155 Tie-dye a fabric article such as a shirt, curtain, tablecloth, scarf, or napkin. Use at least two colors.

TC156 Use a simple off-loom weaving method to make something such as a mat, basket, sit-upon, or wall hanging.

TC157 Weave an item using a loom such as cardboard, soda straw, flat frame, floor, or back strap.

TC158 Braid or knot cord to make an article such as a belt, bag, plant hanger, or lanyard.

TC159 Create a design. Embroider and/or appliqué it on an item such as a place mat, apron, dishtowel, baby blanket, or wall hanging.

TC160 Knit an article such as a potholder, a mat, or a bag.

TC161 Knit or crochet squares for an afghan or articles for a small child.

TC162 Stitch a design in needlepoint, petit point, bargello, or crewel embroidery on an article such as a bag, book cover, or pillow.

TC163 Make a trapunto picture or pillow top.

TC164 Embroider or appliqué a decorative design on a piece of clothing.

TC165 Make a needlework project from a kit. This might be stitchery, needlepoint, or cross-stitch.

TC166 Piece together scraps of materials in a pleasing design to make a quilt block, patchwork pillow, or doll blanket.

TC167 Crochet a small item such as a potholder.

TC168 Make a banner, flag, or pennant for your Camp Fire meeting place.

TC169 Make a fabric toy.

TC170 Demonstrate how to string a loom.

TC171 Use surface printing-batik, tie-dye, silkscreen, or direct dye-to make a design on a tee shirt, placemat, napkin, scarf, or curtain.

TC172 Dye a piece of fabric using natural dye made from berries, plants, animal fats, or other natural material.

TC173 Watch a demonstration of carding and spinning yarn. Find out how yarn is dyed.

TC174 Visit a farm that produces animal fibers, such as an alpaca or sheep farm.

TC175 Make a small figurine or piece of art by felting wool.

TC176 Make a wall hanging, key chain, hanging planter, or other object using macramé.

TC177 Create your own activity using fibers.

TC178 Create your own activity using fibers.

TC179 Create your own activity using fibers.

A STITCH IN TIME

TC180 Equip a sewing box with sewing supplies such as scissors, pins, needles, thread, thimble, pincushion, and tape measure. Store your supplies in the box when you are not using them.

TC181 Thread a needle and knot the thread. Use a thimble when doing hand sewing. Do this several times.

TC182 Learn how to correctly sew buttons, hooks and eyes, and snaps onto these clothes.

TC183 Demonstrate the hand basting stitch, whip stitch, and slip stitch. Explain when you should use each.

TC184 Adjust the hem of a skirt or pants using hand stitching.

TC185 Name and describe the different parts of a sewing machine to someone.

TC186 Demonstrate the following skills in operating a sewing machine: winding the bobbin, threading the machine, adjusting the length of a stitch, starting and stopping, and stitching in reverse.

TC187 Machine stitch on a straight line and a curve. Turn corners and show how to finish a line of stitching so it will not unravel.

TC188 Visit a fabric store and look through patterns books. Pick out a pattern for a clothing item you would like to make. Know your measurements so you can get the right size patterns.

TC189 Choose material for a sewing project. Talk to store personnel and read the pattern instructions to find out the best kind of material for the project you're doing. Make note of the price per yard, width, fiber content, care, shrinkage, and fabric finishes.

TC190 Prepare fabric for sewing. Preshrink it following the care label instructions. Square your fabric if necessary.

TC191 Lay, pin, and cut a garment from a pattern.

TC192 Baste a sewing project. Use pins, hand stitching, or machine basting.

TC193 Sew a piece of clothing. Use the sewing machine and hand sewing skills you have learned.

TC194 Sew an item which you give as a gift or sell in a bazaar.

TC195 Learn how to do one of the following jobs: fix a broken zipper, patch a hole or tear, or sew together a split seam.

TC196 Research the history of quilts and quilting. Create at least one quilt design.

TC197 Sew an object using a quilt design and quilting methods.

TC198 Create your own sewing activity.

TC199 Create your own sewing activity.

TC200 Create your own sewing activity.

PAPER AND PRINTS

TC201 Cut a design in a potato or carrot. Use it for block printing.

TC202 Cut basic symbol designs out of felt, a sponge, or an old rubber inner tube. Mount them on blocks. Use them to print an all-over pattern.

TC203 Make a picture using pieces of torn, colored construction paper, or string and paint.

TC204 Use kitchen items to make prints. Experiment with forms such as bottle tops, potato mashers, wooden or metal forks or spoons, tin cans, and jars.

TC205 Make a print by dipping nature items such as sticks, nuts, shells, or wood scraps in ink or tempera paint. Create your own texture design.

TC206 Use a printmaking technique to decorate paper to be used as a wall or window hanging, place mat, or gift wrapping.

TC207 Design and make greeting cards or invitations using a printmaking technique.

TC208 Make a collage using paper and glue, materials from nature or scraps from fabrics and rugs.

TC209 Make and decorate some paper articles such as hats or masks to be used at a party.

TC210 Print your own stationery using a relief printing method. Carve into a wood or linoleum block to make the relief.

TC211 Silk-screen a design on a piece of clothing or other surface.

TC212 Visit the studio of a print-maker to learn how different kinds of prints are made.

TC213 Make something out of paper mache or pulp such as a dish, holiday ornament, or puppet head. Decorate with paint, cut paper, or paper-punch mosaics.

TC214 Help a younger child make a dollhouse, train, village, automobile, bus, or anything else you can think of out of empty cardboard boxes.

TC215 Make your own paper. Use your paper as stationery. Or, make a sculpture or wall hanging from paper you have made.

TC216 Visit a paper mill, make a poster on how paper is made, or watch a 30 minute video on the process of making paper.

TC217 Make a piece of handmade paper with a design embossed into it.

TC218 Put a design on a piece of paper using gold leaf.

TC219 Make your own fish print.

TC220 Make a print using a stencil.

TC221 Create your own activity using paper or making prints.

TC222 Create your own activity using paper or making prints.

TC223 Create your own activity using paper or making prints.

MODELS AND SHAPES

TC224 Make a life-size snow or ice statue. Or, build a snow fort. Take a photograph or draw a picture of your creation so you'll remember it when the snow melts.

TC225 Make your own clay such as bread dough or salt dough clay. Add color to the clay.

TC226 Dig some natural clay. Sift out rocks and imperfections and work into a smooth texture.

TC227 Make a clay pot using the coil or slab method.

TC228 Make jewelry from clay beads that you have made yourself.

TC229 Make a pot using a potter's wheel.

TC230 Make a clay gift for someone using the pinch pot method.

TC231 Make designs on a clay piece by impressing buttons, tools, or articles from nature to form textures or patterns.

TC232 Make, glaze, and fire a piece of pottery.

TC233 Help make a homemade kiln and fire a piece of pottery.

TC234 Make sand candles in different shapes. Add other nature objects as desired.

TC235 Visit a gallery or pottery studio. Find out the differences among porcelain, china, earthenware, pottery, and stoneware.

TC236 Visit a museum. As you tour the museum, take notice of the decorative and symbolic designs in clay pieces created by potters and ceramists of other cultures.

TC237 Make a figure, a head, or jewelry using plaster or self-hardening casting or carving clay.

TC238 Model or carve a shape or figure out of floating white soap, wax, paraffin, or blocks of melted together crayon.

TC239 Make candles by the dipping process or by pouring liquid wax into a mold. Follow safety rules to avoid being burned by hot wax.

TC240 Combine colored tissue and wire to form a mobile or stabile.

TC241 Form soft wire into the shape of a person, symbol, or animal.

TC242 Make a mask, animal, or other form using crushed aluminum foil or foil over paper mache.

TC243 Create a figure by gluing together natural materials such as bark, twigs, or seed pods.

TC244 Design and make a decoration or centerpiece for a special occasion. It can be a mobile, a floral arrangement, a sculpture, or anything you would like to make.

TC245 Use materials such as broken china, seedpods, pebbles, colored sands, or other nonfood nonperishable materials to make a mosaic.

TC246 Customize a plastic or wood car or airplane model by painting or by changing the design.

TC247 Build and sail a model boat.

TC248 Sculpt an object of your choice out of leftover plastic pieces from model kits or other sources.

TC249 Carve an object out of balsa wood.

TC250 Dip string or clothesline in plaster, drop on wax paper and quickly form into a desired shape.

TC251 Model a piece of jewelry, dish, figure, doll, or puppet head out of salt dough, sawdust clay, or other claylike powder or pulp mixture.

TC252 Visit a pottery studio and watch the potter at work. Learn about the clay, glaze, and tools used in handmade pottery.

TC253 Visit a sculptor's workshop to observe a sculptor at work. Learn what materials a sculptor uses.

TC254 Melt broken crayons and remold them to form a creatively shaped candle or crayon.

TC255 Create your own activity using models or shapes.

TC256 Create your own activity using models or shapes.

TC257 Create your own activity using models or shapes.

MIXED MEDIA

TC258 Decorate a wooden article or gourd with paint or by carving.

TC259 Customize a go-cart with paint, a wood burning tool, or other medium.

TC260 Make a wall decoration with pieces of wood and other materials.

TC261 Make a stained glass window decoration using pieces of colored plastic, cellophane, or glass.

TC262 Use tile, glass, plastic, or leather to make a mosaic design.

TC263 Make a piece of caged jewelry. Wrap stone or glass in copper, brass, or silver wire and mount it as a pendant, necklace, earrings, bracelet, or other piece of jewelry.

TC264 Use coat hanger wire or other flexible wire to form wire figures. Suspend them or mount on blocks.

TC265 Create a design in wood using a wood burning tool or the sun through a magnifying glass.

TC266 Use wood or other material to make a simple toy or game.

TC267 Make or decorate a wood box, footstool, shelf, set of bookends, plant, or flower holder.

TC268 Decorate a plastic or glass article with an etched, laminated, pierced, or painted design.

TC269 Decorate a metal article with stippling, paint, piercing, etching, liquid plastic, or fired enamel.

TC270 Make a simple leather article such as a sheath, key holder, coin holder, billfold, belt, or bookmark. Decorate with a symbol or other design.

TC271 Make and decorate something you can use or wear at Camp Fire events. This might be a hat, scarf, belt, or bracelet.

TC272 Create your own wind chimes using found objects.

TC273 Create your own pony bead pattern and then make your design using beads and string.

TC274 Create your own art activity using a medium of your choice.

TC275 Create your own art activity using a medium of your choice.

TC276 Create your own art activity using a medium of your choice.

MUSIC AND SONG

TC277 Teach your group to sing a song you learned at camp.

TC278 Help make up a group song.

TC279 Learn to sing or play two songs written for Camp Fire.

TC280 Learn to sing or play a folk song from another country. See if you can find out something about its origin. Teach this song to a friend.

TC281 Make and decorate a drum, tambourine, xylophone, or other instrument. Experiment by playing different rhythms.

TC282 Play one of your favorite songs for your group. Tell why you like it. What are the instruments used in the music?

TC283 Plan a musical program around a theme such as Earth Day or spring. Choose about five songs to sing in your program that express your theme. Learn the songs well. Present your musical program to younger Camp Fire members, senior citizen groups, or others.

TC284 Learn several songs from a songbook. Sing them at group meetings or social events. Have someone accompany you on piano or guitar or try to clap or use a tambourine.

TC285 Create your own music video.

TC286 Compose an original piece of music. Form into several groups. Each group should decide on its own melodic or rhythmic patterns. You can shake rattles, clap your hands, tap on desks, hit spoons on plates, or anything else. Use your imagination. Tape each group in turn. Then listen to the tape from beginning to end.

TC287 Fill glasses or bottles with different levels of water so you can play tones with different pitches. Play a melody on your bottles.

TC288 Learn how to play a keyboard or guitar and accompany someone on a song for your group.

TC289 Learn the words to three songs you do not already know. Listen to a recording of the songs and sing along.

TC290 Choose a recording of a piece of classical music. Listen to the recording until you can pick out some major tunes and hum them. What instruments or groups of instruments can you hear?

TC291 Listen to a concert, musical, or opera presented on television or radio. Or, attend a live concert.

TC292 Play several recorded selections from an opera, operetta, or musical. Tell your listeners the story of the selections as you play them.

TC923 Listen to selections of five different categories of music such as folk, country, rock, classical, jazz, bluegrass, ragtime, rhythm and blues, hip hop, pop, reggae, or rap. Tell how you feel about each one.

TC294 Identify several instruments in an orchestra. Draw or find pictures and label the woodwind, brass, string, and percussion instruments.

TC295 Sing for a period of time with a choir.

TC296 Participate in a musical performance or festival.

TC297 Form a Camp Fire singing group. Perform before an audience.

TC298 Talk to someone who is a professional musician. Find out how much time was spent training and how much time is spent practicing.

TC299 Take instrument or singing lessons for a period of at least 3 months.

TC300 Teach yourself how to play a new instrument. Practice for a period of at least 3 months.

TC301 Create your own activity with music.

TC302 Create your own activity with music.

TC303 Create your own activity with music.

DRAMA

TC304 Think of something that happened to you that made you happy, sad, or angry. Recreate it in a scene in front of your group.

TC305 Choose another group member to serve as your partner. Make up a scene or story and act it out in front of other group members.

TC306 Act out talking on the phone to someone. Use your imagination and create an entire story that occurs via the telephone.

TC307 Record your voice on a tape recorder or with a cell phone. Listen to it. Find someone to help you improve the diction, tone, and quality of your voice when

performing. Practice improving with their suggestions.

TC308 Present a dramatic reading or a one-act play for your group or other group.

TC309 Make a speech in front of an audience using a microphone. Practice using a microphone before you present your speech.

TC310 Participate in a choral speaking production performed for the public.

TC311 Make a speech about a problem that concerns you. Explain the problem as you see it. Suggest solutions to the problem.

TC312 Make up an original skit with your Camp Fire group. Perform it in front of your family or friends.

TC313 Act out a favorite story in a group. Take parts, find costumes, and make scenery.

TC314 Learn about constellations and then create your own story about one of the constellations. Act it out with your group.

TC315 Make three puppets out of a variety of materials including string, paper bag, stockings, paper and rod, or peanuts. Use your puppet in a game, play, or story.

TC316 Make a simple box stage and scenery for a puppet show. Use it to give a show.

TC317 Make and decorate a mask made out of a paper bag, a paper box or cylinder, cloth, paper mache, or a large paper plate. Use your mask in a play, pageant, game, or party.

TC318 Help plan and put on a talent show or variety show.

TC319 Start a costume box to be used for informal dramatics. Include a make-up kit if you wish.

TC320 Act out an important historical event such as the signing of the Declaration of Independence. Or, dramatize an event from Camp Fire's history. Use props and costumes, or just your imagination.

TC321 Choose a character you'd like to be. Learn how to use stage theatrical makeup to create your character.

TC322 Be an active member of a school or community drama group or theatre group.

TC323 Put together a clown act with other group members. Use make-up to create clown faces and make funny outfits out of too small or too large clothes. Present your clown act to an audience.

TC324 Videotape a performance by group members or classmates.

TC325 Perform a mime act. Make up your own motions or copy a mime you've seen on television, on stage, or in a book.

TC326 Join a speech team run by your school or another organization.

TC327 Create your own activity in drama.

TC328 Create your own activity in drama.

TC329 Create your own activity in drama.

DANCE

TC330 Demonstrate improvisational dance such as walking, hopping, marching, skipping, leaping, turning, twisting, and falling to various rhythms and tempos of music.

TC331 Listen to different kinds of music. Try to express in physical movement the moods and ideas the music suggests.

TC332 Make up a dance to tell a story.

TC333 Create a dance to accompany a choral speaking or a poem.

TC334 Help a group of young children make up movements to different kinds of music.

TC335 Help a group of young children make up movements to different kinds of music.

TC336 Watch the live performance of a ballet. Tell someone the story that was told in the ballet.

TC337 Attend a dance performance given by professional or skilled amateur dancers. Describe some of the movements used to tell the story.

TC338 Improvise a dance in front of an audience. While you are dancing, ask the audience to help you by rattling paper, shouting out numbers at random, scraping feet on the floor, ringing bells, etc. React to these actions and sounds as part of your dance.

TC339 Find a drawing or picture of a dancer, person or object in an interesting pose. Begin a dance with this pose, building a story around it.

TC340 Learn ice dancing or roller dancing movements. Perform a dance on ice or roller skates.

TC341 Learn to dance one circle dance and one line dance.

TC342 Learn five basic square dance steps or moves. Use them in a dance.

TC343 Learn how to call a square dance. Or, teach some friends square dance steps.

TC344 Visit a cultural center or have a speaker come to your group so you can learn about a cultural dance and its significance to a particular culture.

TC345 Learn an American folk dance other than square dance.

TC346 Teach a folk dance to someone else.

TC347 Learn three basic ballet or tap dance steps or moves.

TC348 Learn a popular dance step that is new to you. Teach it to someone else.

TC349 Participate in a performance of dances to which others are invited.

TC350 Learn popular dances from at least three different decades of the past. You might do the Charleston of the twenties, the jitterbug of the fifties, twist of the sixties, or breakdancing from the eighties.

TC351 Create and perform a dance using a prop such as a hula hoop or a scarf or ribbon.

TC352 Enroll in and attend dance classes for at least three months.

TC353 Create your own dance activity.

TC354 Create your own dance activity.

TC353 Create your own dance activity.

CREATIVE WRITING

TC354 Sit in a familiar place and close your eyes. Listen with your eyes closed for several minutes. Then write down all the sounds you hear and what you thought the sounds were. Describe what you heard in a story or a poem.

TC355 Choose a favorite color. List as many things as you can that are that color. Think of how that color makes you feel. Write a poem about the color you choose.

TC356 Write a poem with your group. Choose one person to be the recorder. Sit in a circle and have a person start by giving a line. Then go around the circle, each person adding another line until all the group members agree that the poem is finished.

TC357 Write a poem on a special theme to be used at a group event.

TC358 Read poetry from another culture. Describe what you learned about that culture through the writings of its members.

TC359 Choose some poems that you think young children would like. Read them several times until you can read them with expression. Then share your poems with a group of young children.

TC360 Read a book of haiku, a Japanese form of poetry. Learn the form for writing haiku and write several of your own.

TC361 Participate in a “magic ring” where each person shares a favorite poem.

TC362 Keep a journal while at a camp or on a trip. Write down what you do and what you see. Write down your feelings.

TC363 Put a poem that you wrote to music.

TC364 Collect favorite poems and song lyrics. Keep them together in a notebook.

TC365 Do an activity that uses your whole body, such as swimming underwater, bicycling up a steep hill, or taking a cold shower. Describe how it feels in words. Use vivid language to communicate your sensations to others.

TC366 Start a collection of poetry about your favorite nature subjects. Include authors and sources.

TC367 Describe in words several favorite smells and tastes. You could write about the taste of chocolate or the smell of leaves in the autumn. Read your descriptions to others and have them try to guess what you are describing.

TC368 Write a character sketch of a person you know well. Describe how this person looks and acts and what kind of personality he or she has. Share your character sketch with the person you wrote about.

TC369 Describe alternative uses for ordinary objects such as a brick, flowerpot, or a kitchen utensil. Use your imagination.

TC370 Cut a picture out of a magazine or newspaper without reading the caption or accompanying story. Write a story that describes what’s happening in the photo.

TC371 Write a description of a familiar place from an unfamiliar point of view. Imagine you are an alien from another planet visiting your home, school, or

neighborhood. Describe what you see going on. Try to explain what is happening.

TC372 Write a story about an event in your life during which you felt a strong emotion such as anger, joy, sorrow, or fear. Try to convey your feelings in the story.

TC373 Write a poem or story. Submit that poem or story to a children's magazine or to a school publication.

TC374 Read the newspaper and clip out articles that you think are interesting and well-written. Use these articles as models to write a news story on an event that you attended.

TC375 Write a news article about group happenings or a Camp Fire event. Submit it to be published in your council newsletter, school newspaper, or other periodical.

TC376 Read a news story in the newspaper or online and watch coverage of the same news event on television. Describe the differences in how the same news event was covered in print and on television.

TC377 Read interviews in newspapers and magazines to find out how to write an interview story. Interview a person about something he or she does. Using the information you gathered from the interview, write an article.

TC378 Read news articles from different sources about the same event or topic. Write about the similarities and differences you noticed among the articles. What points of views are the authors coming from?

TC379 Have a book party. Come dressed as your favorite character from a book. Talk and act as you think that character would.

TC380 Write a children's book. Use your own drawings to illustrate it or cut out pictures from magazines.

TC381 Write a story and then turn it into the script of a play. Put on the play with you Camp Fire group.

TC382 Learn about graphics and photos and how they are used to support the text in publications.

TC383 Use a computer to create a flyer to describe an event. Use clip art or other online images to illustrate your flyer.

TC384 Write a story or a short play based on an experience you actually had.

TC385 Write and produce a newspaper. Include articles and photographs about what is happening at school, Camp Fire, or in your neighborhood.

TC386 Create your own creative writing activity.

TC387 Create your own creative writing activity.

TC388 Create your own creative writing activity.

PARTY TIME

TC389 Make your own invitations to a party you are giving. Include the theme of the party in the design of the invitations. Mail your invitations.

TC390 Make party decorations and favors that carry out a theme.

TC391 Lead two different games at a party.

TC392 Decorate a cake in a way that carries out a party theme.

TC393 Make personalized place cards for everyone in your family at a special family dinner.

TC394 Arrange and decorate a table for a sit-down or buffet meal with a special theme.

TC395 Bring a snack you make yourself to a Camp Fire meeting. Serve it in an attractive way.

TC396 Plan and cook a special meal such as a birthday dinner for a friend or member of your family. Be sure to include this person's favorite foods.

TC397 Give a surprise party for a friend or family member or a help plan a birthday party for a child.

TC398 Write a thank-you note for a party you attended. Decorate it in an original way.

TC399 Create your own party time activity.

TC400 Create your own party time activity.

TC401 Create your own party time activity.

FIX-UP TIME

TC402 Learn and use a hammer to build something with an adult.

TC403 Learn and use a screwdriver to build something with an adult.

TC404 Learn and use a handsaw to build something with an adult.

TC405 Learn and use a drill to build something with an adult.

TC406 Make an item to decorate your room. You could make a pillow cover, a wall hanging, or book shelves.

TC407 Rearrange your room. If you share your room with others, ask them to help you decide on changes. Plan ahead by making drawings. Have an adult help you move heavy furniture.

TC408 Visit a home show. Make a list of things you see that you would like to have in your home someday. Can you make any of these yourself?

TC409 Interview an interior designer. Find out how this person decides on different designs and colors to use.

TC410 Visit a swap shop or secondhand store. Purchase one item you can use to decorate your room.

TC411 Set up a special area in your room to display a collection of hobby projects.

TC412 Visit a fabric store. Pick out different fabrics you like that could be made into curtains for your room. Compare prices and quality of material. Purchase material and sew it into curtains (optional).

TC413 Visit a paint store. Look at different colored paint chips. Choose color schemes you think would look good in your room. (You don't have to purchase paint to meet this activity's requirements.)

TC414 With an adult, paint a room with a color you like.

TC415 Learn how to repair a nail hole in a wall.

TC416 Design a plan to organize all your school materials, craft supplies, toys, books, or clothes in your room. Draw your plan on paper or map it out using the computer.

TC417 Create your own fix-up activity.

TC418 Create your own fix-up activity.

TC419 Create your own fix-up activity.

TRAIL TO CREATIVITY ACTIVITY RECORD

[illegible]

TRAIL TO THE ENVIRONMENT**KNOW ABOUT NATURE**

TE100 In an interesting natural place, make a circle on the ground with a string one yard long. Make a list of everything that you find inside the circle. Include all living and non-living items. Choose three items on your list and learn more about them.

TE101 Be able to recognize your state flower, bird, and tree in their natural settings.

TE102 Visit a national park. Read about the park and try to talk to a ranger while you're there. Share something you learned with your group.

TE103 Visit a national forest. Share your experience with your group.

TE104 Visit a state park. Read about the park and try to talk to an employee while you're there. Share something you learned with your group.

TE105 Visit a city park. Take a self-guided hike/walk and later share with your group something you appreciate about the park.

TE106 Visit a natural history museum. Share something you learned with your group.

TE107 Find out the names and characteristics of some plants in your area. Record some ways to identify them, fun facts, and ways they were used by indigenous people.

TE108 Name several animals that live in your area. Record some ways to identify them, fun facts, and ways they were used by indigenous people.

TE109 Make a scrapbook about your favorite things in nature. Use clippings, your own sketches, photographs, or pressed leaves.

TE110 Visit a national park or national forest. Talk to the people who work there. Find out what is being preserved in this forest or park. Find out about careers in the U.S. Forest Service or the National Park Service.

TE111 Create your own activity to learn more about nature.

TE112 Create your own activity to learn more about nature.

TE113 Create your own activity to learn more about nature.

HELP YOUR ENVIRONMENT

TE114 Join a conservation group for young people. Read the material that comes to you as a member. Participate in activities that interest you.

TE115 Subscribe to an online newsletter that encourages support for the environment and read at least three issues.

TE116 Find out about two organizations that work to protect wildlife. Learn what you and your family and friends can do to help.

TE117 Find an area in your neighborhood or nearby park where litter is a problem. Keep this area clean for a period of time agreed upon by you and your leader.

TE118 Look at a list of endangered species. These are animals, birds, or plants that are in danger of becoming extinct. Find out which animals, birds, or plants on the list live in your area.

TE119 Read about an animals or bird that has become extinct within the last 50 years. Tell why it became extinct.

TE120 Visit a recycling center. Learn the recycling process and what products can be made using recycled materials.

TE121 Conduct an aluminum can drive. What is the current rate for recycling aluminum cans? Give the profits to a local charity.

TE122 Visit a wastewater treatment plant and learn about what happens to the water you use after it goes down your drains.

TE123 Learn how trees and forests help conserve wildlife, soil, and water supplies. Point out examples of trees at work in your area.

TE124 Plant a tree in a place where trees are needed. Be responsible for caring for it for two months.

TE125 Volunteer your time to do something to improve the environment of your community. Help clean up a creek bank, make trail signs for a local park, or plan your own service project.

TE126 Plant a cover crop such as grass, clover, sweet clover or wild rose. Choose a site where a cover crop is needed for erosion control or to make a place look pretty. You might do this at camp, along a shoreline, on the side of a new highway, or in your yard. Ask you local highway commission or other officials before you plant in public places.

TE127 Make a wildlife conservation poster. Display it in a public place such as your school, a library, or a store.

TE128 Find out what is meant by minimum impact/Leave No Trace camping. Tell ways that you, your family, and your group can camp without leaving a trace.

TE129 Make a bird feeder. Find out what kinds of food birds in your area enjoy. Put the feeder where birds will use it.

TE130 Give the birds a present. Decorate a shrub or tree with food that birds in your area will enjoy.

TE131 Make and maintain a birdbath. Keep a list of the birds you see.

TE132 Find out who Woodsy Owl is. Do something to help his campaign.

TE133 Find out who Smokey the Bear is. Read about how you can help prevent wildfires.

TE134 Participate in one of your city's Arbor Day activities.

TE135 Find out about your state's conservation laws. Explain that ones that apply to people your age.

TE136 Keep track of all the paper and plastic products that you use at home and at school for one day. Make a list of any unnecessary usage and reduce the amount of paper and plastic products used in your home for a week.

TE137 Visit a paper mill to see how paper is made. Find out how paper can be recycled.

TE138 Interview a soil conservationist. It takes between 300 and 1,000 years for nature to make one inch of topsoil. How long does it take to erode? Ask the conservationist how you can keep soil from eroding.

TE139 Figure the amount of water you use personally in one week. Estimate the amounts for activities such as bathing/showering, flushing a toilet, washing dishes, etc. and add them up.

TE140 Become aware of ways to conserve water. Make a poster that lists five ways to save water. For example, you can save water when you brush your teeth by turning off the faucet while you brush.

TE141 Become aware of your electricity usage. Make a poster that lists five ways to save electricity. For example, you can save electricity by turning off the lights when you leave a room.

TE142 Find out about the 7 principles of Leave No Trace. Make a poster that lists all of them with illustrations.

TE143 Do some research on where your food comes from. Take a fruit you like to eat, a gallon of milk, a carton of eggs, and a pound of beef and record all of the steps each has to take to get to you.

TE144 Make or purchase reusable grocery bags and use them at the grocery store.

TE145 Create your own activity to help your environment.

TE146 Create your own activity to help your environment.

TE147 Create your own activity to help your environment.

MAKE THINGS FROM NATURAL MATERIALS

TE148 Arrange a bouquet or wreath of flowers, grasses, leaves, or seeds. Use good conservation practices in selecting materials for your arrangement.

TE149 Make jewelry from seashells or stones you have found.

TE150 Make a knife, fork, or spoon from material found outdoors.

TE151 Decorate your own stationery or make a picture for your room using items from nature. Make leaf prints or spore prints. Or, try splatter painting or crayon rubbings.

TE152 Transfer a leaf pattern onto cloth. Do a crayon rubbing. Iron your crayon print to make it permanent. Or, hammer cloth placed over a leaf to make an imprint. Dip cloth into vinegar to make the hammered cloth print permanent.

TE153 Tie-dye material using natural dyes. Do this with the help of an adult.

TE154 Collect items such as driftwood, rocks, twigs, leaves, and seedpods. Glue them together in the shape of birds, animals, or creatures you make up.

TE155 Make a loom and weave a mat on it. Use grass, rushes, or other materials from nature.

TE156 Weave a basket out of natural materials.

TE157 Make a simple musical instrument using natural materials. Play your instrument.

TE158 Create a mosaic using natural materials such as driftwood, twigs, or pebbles.

TE159 Create your own activity to make things from natural materials.

TE160 Create your own activity to make things from natural materials.

TE161 Create your own activity to make things from natural materials.

EARTH SCIENCE

TE162 Get a soil map of your county from a local soil conservation agency. Collect soil samples from three different locations. Display the samples by connecting them with yarn to the areas on the map where you found them.

TE163 Fill a small glass jar with water collected near the shore of a pond, lake, river, or ocean. Let the water stand. Watch the sediment-sand, gravel, clay, mud-settle to the bottom of the jar. Sediment is the main ingredient in sedimentary rocks. How do you think sediment becomes rock?

TE164 Visit a mine, quarry, or a gravel, clay, sand, or shell pit. Find out how the product is removed, transported, sold, and used.

TE165 Find a building excavation, roadcut, rock quarry, or stream bed where you can see all layers of soil. Make a drawing of the site. Identify and label each soil layer.

TE166 Observe the affects of pressure. Put a slice of fresh brown bread on top of a slice of fresh white bread. Wrap the bread in wax paper or put it in a plastic bag. Stack three or four heavy books on it. Wait for one hour, then look at the bread. This is how pressure forms sedimentary rocks. Find an example of sedimentary rock.

TE167 Read about minerals. Get information from your school or public library. Ask at school for a mineral collection to look at and study. Or, start your own mineral collection. Share your findings with the group.

TE168 Investigate soil. Fill a paper cup with soil from a garden or soil found below grass. Put a white sheet of paper on a table. Spread the soil on the paper. Using a magnifying glass, look at the soil. Draw pictures or describe what you see in the soil.

TE169 Learn about marble, which is a metamorphic rock. What kind of rock did marble used to be? Go to a place in your community and see polished marble. Examine it closely.

TE170 Learn about granite, which is an igneous rock. What minerals make up granite? Try to find some granite outdoors, and then go to a place in your community and see polished granite. Examine it closely.

TE171 Learn about volcanoes. What is a volcano? What does it do to the earth's surface? What are some volcanoes near you? What does it mean for a volcano to be active or dormant? How does a volcanic mountain form?

TE172 Make a geyser. Do this with the help of an adult. Find a metal funnel. Turn it upside down. Tie several weights on the funnel with string, yarn, or fishing line. Leave the funnel upside down and place it in a pan. Fill the pan with water so that only the small end of the funnel is above the water. Put the pan on a hot plate or burner. Bring the water to a boil. Describe what happens. Read about well-known geysers.

TE173 Interview relatives, friends, or neighbors to find out how changing temperatures, moisture, ice, and plants can affect sidewalks and cement house foundations. How do these same things affect mountains and rocks? What is this process called? Make a poster to illustrate what you have learned.

TE174 Study a map of North America to find out where major rivers such as the Missouri River, the Mississippi River, and the Ohio River start. Trace where they go.

TE175 Learn about planting zones and climates. Name three plants that will grow where you live. Name three that won't and why they won't.

TE176 Study how tornadoes form. Then make a tornado in a bottle using an online tutorial.

TE177 Create your own earth science activity.

TE178 Create your own earth science activity.

TE179 Create your own earth science activity.

PLANT LIFE

TE180 Observe wild flowers growing outdoors. Describe them to an adult. Learn how to recognize them at different times of the year.

TE181 Discover how plants are necessary to your life. Trace all the items in your lunch back to their original plant source. How could the meat in your sandwich come from a plant source? Show what you learned in a chart.

TE182 Force flowering shrubs or trees (forsythia, pussy willow, fruit tree sprigs) to bloom early in the spring. Do this by bringing them inside and putting them in water. What causes them to bloom? Make an attractive arrangement.

TE183 Read about the life of George Washington Carver and his work with plants. Report your findings to the group.

TE184 Identify several plants by their odor, feel, or taste. Do this with an adult. Tell something about each.

TE185 Identify two kinds of plants that can injure people or animals. Tell why they are harmful.

TE186 Without touching the plants, tell the difference between poison ivy and Virginia creeper or between poison sumac and harmless sumac. Or, be able to identify poison oak—often called oak leaf poison ivy—or stinging nettles. Explain how to protect yourself against poisonous plants. Tell what to do if you are exposed to these plants.

TE187 Look for plants that grow in different kinds of conditions. Identify plants that grow best in shady or sunny places and in wet or dry soil.

TE188 Discover how wind affects evaporation. Wet two pieces of cloth thoroughly. Hang one cloth outdoors in a windy location. Hang the other in a sheltered spot. Check drying times. If you were a wild flower or plant needing a lot of water, where would you live?

TE189 Find several different kinds of ferns growing outdoors. Notice the difference in color, texture, and size. Know the names of two kinds of ferns. Draw a sketch of each.

TE190 Recognize three kinds of trees by the shapes of their leaves, textures of the bark, or leaf arrangement. Test yourself by identifying these trees blindfolded.

TE191 Draw or take pictures of three trees whose shapes have been affected by the wind.

TE192 Create your own plant life activity.

TE193 Create your own plant life activity.

TE194 Create your own plant life activity.

GREEN THUMB

TE195 Visit a greenhouse, a plant shop, a garden show, or an exhibit. Talk to experts about growing plants.

TE196 Invite a horticulturist or someone who works at a greenhouse to speak to the group about his or her job. Make a list of questions to ask.

TE197 Read about hydroponics. Tell your group what you learned.

TE198 Learn about the genetic modification of food, its current and future applications, and its advantages and disadvantages.

TE199 Plan and/or plant a garden to attract wildlife, butterflies, bees, and other beneficial insects.

TE200 Harvest seeds from your vegetable garden. Save to plant next year. Learn which vegetables and vegetable varieties are most suitable for this.

TE201 Plant a garden from seeds that you have saved or collected.

TE202 Plant at least three different varieties of a particular vegetable or fruit. See how they differ in growth, harvest time, flavor, appearance, storage ability, insect or disease resistance, etc.

TE203 Repot three plants. Explain how you know when to repot a plant.

TE204 Plant an heirloom vegetable, fruit, or flower variety.

TE205 Help with a community garden for at least one month.

TE206 Learn about mulch. What does it do and what are its benefits and drawbacks? Mulch an appropriate plant at the appropriate time of year.

TE207 Find out the water and light requirements for different houseplants. Make a chart that shows what kind of care they need.

TE208 Call, visit, or explore the website of your County Extension office and learn about what services they offer.

TE209 Make a chart, map, or poster showing where different vegetables, nuts, fruits, etc. were first domesticated. Include at least 10 different foods.

TE210 Follow a schedule for watering and fertilizing your family's houseplants. Do this for a period of time agreed upon by you and your family.

TE211 Grow plants or flowers in a window box or decorative porch container. Or, grow an herb garden in a windowsill.

TE212 Grow plants from kitchen cuttings and seeds. Use fruits and vegetables such as carrots, beets, yams, radishes, pineapples, or avocados.

TE213 Find out about the differences between annuals and perennials. Grow at least one plant of each.

TE214 Take responsibility for one yard task for a period of time agreed upon by you and your family. Mow the lawn, rake leaves, or water the lawn.

TE215 Work regularly in a family garden. Take complete responsibility for some part of the garden. Agree with your family on what you will do and for how long.

TE216 Visit a farmers market, orchard, or vineyard. Talk to the person in charge about growing things for sale.

TE217 Harvest seeds from grasses, plants, and wildflowers. Plant them in an appropriate place.

TE218 Plant a tree or bush. Care for it for one season.

TE219 Learn how to prune trees or trim bushes.

TE220 Give plants an early start in the spring. Grow plants in a cold frame or hot box. Set them out in the garden when the time is right.

TE221 Help prepare a garden area for the winter. Mulch flowerbeds and trim back dead stocks.

TE222 Make a terrarium. If necessary, visit a garden store to purchase supplies you need.

TE223 Talk to a gardener or a landscape designer about his or her work.

TE224 Draw a plan for a small garden. Use books to help you with your designs. Or, ask a person who gardens a lot to help you.

TE225 Use rocks, fencing, or bricks to make an attractive border for a garden.

TE226 Care for and store garden tools properly. Do this regularly for a period of time agreed upon by you and your family.

TE227 Learn about different kinds of garden chemicals used to control weeds, insects, and other pests.

TE228 Experiment with natural methods of pest control. Find out how planting certain kinds of flowers and plants together will help eliminate pest problems.

TE229 Start a compost pile or heap. Add to it regularly. Use it to fertilize your garden.

TE230 Enter a special plant you've grown in a garden show or exhibit.

TE231 Give a plant you have grown as a gift. Pot it in an attractive way. Include a note describing how to care for the plant.

TE232 Participate in a flower festival or some other event that celebrates growing things in your area.

TE233 Read about Sequoia trees. How did they get their name? Where do they grow? How tall is the average Sequoia? How big around is the trunk? How old are most of these trees?

TE234 Find out how to use a tree's rings to learn its age. Find a tree stump. Determine how old the tree was when it was cut down.

TE235 Find out how to use a tree's rings to learn about climate. What can the width of each ring tell us about things like precipitation and temperature? What do the different colors of the rings indicate? How are scientists using them to study climate change?

TE236 Prepare a flower or plant arrangement for your home. Identify as many of the flowers or plants in it as you can.

TE237 Read about the parts of a flower. Show a flower to your group and identify its parts for group members.

TE238 Discover how water rises up the stems of plants. Place a celery stalk with leaves into a glass of water colored with red food coloring. After the leaves turn red, remove the stalk. Cut several cross-sections and look at them.

TE239 Change the color of a carnation. Fill two glasses half full of water. Add different colors of food coloring to each glass. Carefully split the stem of a fresh white carnation. Place one end of the stem in one glass, the other in the second glass. Observe what happens.

TE240 See how seeds grow. Obtain some lima beans, grass seeds, or radish seeds. Line a glass jar with a paper towel. Slip seeds between the paper and the glass. Keep about an inch of water at the bottom of the jar. Set the jar in a warm place and observe.

TE241 Root a vine cutting in water. Find out how to pot a plant. Pot the rooted cutting. Care for it.

TE242 Collect seeds. Include seeds that fly, float, stick to a passerby, or fall to the ground. Group them by the way they are moved place to place. Identify and mount them on a piece of paper, labeling each seed.

TE243 Collect and press several wild flowers, ferns, or tree leaves. Label each with name, date, and place found.

TE244 Photograph different species of trees and shrubs in your neighborhood or park. Identify them by name.

TE245 Mount and label leaves from trees and shrubs common to your geographic area.

TE246 Mount and label cones from several kinds of coniferous trees.

TE247 Create your own green thumb activity.

TE248 Create your own green thumb activity.

TE249 Create your own green thumb activity.

ANIMALS

TE250 Learn and illustrate different types of prehistoric animals.

TE251 Draw or use pictures to illustrate the life cycle of a frog.

TE252 Select ten different animals. Find out the names for their young.

TE253 Name three different classes of animals. Name three animals that belong to each class. Learn an interesting fact about each animal.

TE254 Make a poster about cold-blooded and warm-blooded animals. List the names or draw pictures of cold-blooded animals in one column and warm-blooded animals in another. Explain to your group the difference between cold-blooded and warm-blooded animals.

TE255 Discover how temperature affects cold-blooded animals. Put some soil and an earthworm in a container. Chill the container for 10 minutes in the refrigerator. Take the container out of the refrigerator. Carefully watch the worm's movement. Watch the worm's movement again in 30 minutes.

TE256 Find out what a mollusk is. Make a list of mollusks. Choose one from the list and become an expert on the subject.

TE257 Make and use a dip net for collecting fresh-water creatures. Be sure to return to creatures to the water after studying them.

TE258 Punch holes in the lid of a fruit jar. Catch an insect and put it in the jar. Examine it carefully with a magnifying glass. Then let the insect go. Do this with several kinds of insects. Tell how insects are helpful to humans.

TE259 Identify several insects commonly found in your home or yard. Read about them and learn new facts about each.

TE260 Observe insects at night by placing a lighted blue bulb outdoors on top of a sheet. Watch the insects come. Identify several different kinds.

TE261 Observe a snail or slug and watch its movements. Does it react to you? Does it leave a trail?

TE262 Make an ant farm or observe an ant colony. Watch one particular ant for three minutes. Place a small piece of candy near the ants' hole. What do the ants do? Put a

small rock over the hole for a short time. What happens?

TE263 Find and raise a caterpillar. Read about its care. Watch it become a butterfly or a moth.

TE264 Watch a spider spin a web. Draw a diagram showing how it was done.

TE265 Look at a completed orb (round) spider web. Is the web more horizontal or vertical? Are flying or crawling insects caught in the web? Where is the spider's resting place in the web? If it is not on the web, try to find out where it would rest. If you can catch a fly, toss it in the web. Watch what the spider does to it. Tell your group about orb spider webs.

TE266 Learn about the different jobs of bees in a bee colony. Do this from study and personal observation.

TE267 Read about the life cycle of a mosquito or a flea. Find out what you can do to keep mosquitoes or fleas from breeding in or around your home.

TE268 Tell group members how insects are different from all other animals. Also explain the differences between insects, spiders, centipedes, and millipedes.

TE269 Set up an aquarium. Care for several kinds of fish.

TE270 Watch fish in an aquarium, pond, or hatchery. Recognize the colors, shapes, and other features of several different kinds of fish.

TE271 Visit a fish hatchery. Find out what the government does to protect and increase the number of fish in your state.

TE272 Collect and raise tadpoles until they turn into frogs. Change the water frequently. Feed them fish food, lettuce, or pieces of hardboiled eggs.

TE273 Learn about turtles. What is the difference between a turtle, terrapin, and tortoise? How big can these animals get? How long can they live?

TE274 Find and keep a turtle for a few days, giving it proper food and care. Write a description of the turtle and its behavior.

TE275 Describe snakes that are common in your area. Include those that are poisonous. Learn how snakes are helpful to humans.

TE276 Visit a national, state, or private bird refuge. Learn about the kinds of birds that use the refuge.

TE277 Observe three kinds of birds in the outdoors. Describe them to others.

TE278 Watch where birds find their food. Watch several birds get their food from the air. Watch several birds get their food from trees or other plants. Describe what the birds eat.

TE279 Recognize and identify several birds by their calls. Record these bird calls. Or, learn to imitate the birdcalls.

TE280 Watch birds build a nest. Describe what kind of bird you observed, the shape of the nest it built, what materials were used, and how long the bird worked on its nest. Keep observing this nest while the birds use it.

TE281 Look for birds' nests. Tell where you see them. Photograph or sketch the nests. Describe what kinds of birds are using them or may have used them in the past. Do not remove nests from trees or bushes.

TE282 Watch the nest of a mother bird. Record what happens before hatching and afterward until the baby birds leave their nest.

TE283 Visit a farm and observe eggs in incubation. Sketch or photograph the stages during the hatching period.

TE284 Draw pictures of bird beaks of different shapes. Find out how different shapes of beaks are clues to what kind of food birds eat. Try to guess what kind of food is eaten by some of the birds you see.

TE285 Find out what kinds of hawks and owls live in your area. Watch carefully until you see one in the outdoors. Tell how hawks and owls are helpful to people.

TE286 Find out what is meant by predator-prey relationships. Look up five predators on the Internet or in an encyclopedia and make a list of each predator's prey.

TE287 Read about an extinct or prehistoric animal. Make a poster with a picture or sketch of the animal on it. Tell your group about the animal, using the poster as a visual aid.

TE288 Learn about how different insects or animals protect themselves. Think about coloring, smell, and shape. Describe how two kinds of insects or animals protect themselves.

TE289 Look for signs of animals in the area where you live. Find some animal tracks. Identify two animals by the sounds they make. Look for remains of animal meals or scat.

TE290 Locate two animal homes. In each case, notice the location, materials used, and who lives in the home. Find out why it is located in this spot. Be careful not to disturb the animal or its home.

TE291 Visit a dam built by animals. Find out how dams made by animals or people can be useful and how they can be harmful to people and nature.

TE292 Track an animal by its marks in the snow, sand, mud, or dirt. Identify the animal by its tracks.

TE293 Make a cast of an animal track using plaster of paris.

TE294 Learn about the winter habits of animals in your area. Find out which animals stay active all winter and which hibernate. Learn which animals migrate from your area to somewhere else or come to your area from somewhere else.

TE295 Observe what happens during the birth of an animal. Watch the newborn for a few minutes each day during its first week of life. Record the changes you see.

TE296 Learn about invasive plants and animals in your area. Why are invasive species harmful to native plants and their habitats? Take a walk outside and see if you can observe any, such as English ivy.

TE297 Define the word biodiversity and learn about its benefits. Take a walk outdoors and map out a 5 foot by 5 foot area. Count how many different species or signs of species you observe.

TE298 Create your own activity to learn more about animals.

TE299 Create your own activity to learn more about animals.

COOKING OUTDOORS

TE301 Show that you know how to care for and use a pocketknife. Use a whetstone to sharpen a pocketknife or paring knife.

TE302 Show that you know how to care for and use a saw.

TE303 Put together a mess kit for outdoor cooking and eating. Explain to an adult why you have included the items you did.

TE304 Find out how to get a fire permit. Know the fire regulations and precautions in the area where you are hiking, cooking out, or camping. Tell how to report a forest fire.

TE305 Make matches waterproof. Use the matches on a cookout or camping trip. Pack them properly for carrying.

TE306 Lay, light, use, and put out a wood fire outdoors. Follow safety practices while doing this. Be sure outdoor fires are allowed in the area.

TE307 Protect a woodpile from damp ground, rain, or heavy dew.

TE308 Build a fire and let it burn down to a bed of coals. Cook at least one item over the bed of coals.

TE309 Lay a cooking fire. Keep it going while a meal is cooked.

TE310 Build and light three different kinds of fires. Tell when to use each kind of fire.

TE300 Create your own activity to learn more about animals.

TE311 Construct a reflector oven. Use it to bake biscuits or some other appetizing dish.

TE312 Lay, light, use, and put out a charcoal fire. Follow safety practices while doing this.

TE313 Cook a meal over a charcoal fire.

TE314 Teach another person how to build a fire.

TE315 Make and use fire starters. Cotton balls dipped in petroleum jelly and laundry lint are two kinds of fire starters.

TE316 Build a fire for a special event. Build it to last through the whole event.

TE317 Help collect and pack food for a group outing.

TE318 Make a tin can stove. Cook part or all of a meal on it.

TE319 Assist with cooking and serving a one-pot meal cooked outdoors.

TE320 Cook potatoes or corn outdoors using two different methods.

TE321 Bake or steam fish or other seafood outdoors.

TE322 Cook a meal without using utensils such as skillets, pots, forks, spoons, or skewers.

TE323 Cook a meal of vegetables in foil. Help prepare the food, wrap it in foil, and cook it.

TE324 Cook something using the sun as a heat source. Consider building a solar oven.

TE325 Prepare two recipes outdoors in a Dutch oven.

TE326 Make up your own outdoor cooking recipe. Try it out with friends. Decide how good your new recipe is.

TE327 Clean up camp garbage and trash after three different meals. Dispose of it properly.

TE328 Cook a meal in a fireplace or grill such as those found in parks or campgrounds.

TE329 Cook one meal using dehydrated or freeze-dried foods.

TE330 Make a knapsack, bag, or case for carrying camp supplies.

TE331 Learn how to set up and use a dishwashing station while camping. Wash the dishes from one meal using the proper method.

TE332 Cook an outdoor meal for your family. You can ask for the help of one other person.

TE333 Prepare, eat, and clean up an outdoor meal in rainy or snowy weather.

TE334 Create your own cooking outdoors activity.

TE335 Create your own cooking outdoors activity.

TE336 Create your own cooking outdoors activity.

KNOTS

TE337 Collect samples of different kinds of rope or cord. Learn about the strengths and uses of each kind.

TE338 Tie a slipknot and a square knot. Know how these knots are used.

TE339 Tie a simple hitch, half hitch, and two half hitches. Know how these hitches are used.

TE340 Tie a clove hitch and a taut line hitch. Use them for a clothesline on your next camping trip.

TE341 Tie a bowline knot. Explain how you can use this knot.

TE342 Use a sheet bend to tie two rope ends together.

TE343 Using knots that you have learned, make a useful item. You could make a dog leash or bag handles.

TE344 Using knots you have learned, macramé a decorative item.

TE345 Make a piece of useful equipment using a square or diagonal lashing. You might make a picture frame or a towel rack.

TE346 make a piece of useful equipment using sheet or continuous lashing. You could choose to make a tripod for a washbasin or a footbridge over a small creek.

TE347 Make a table using two kinds of lashing.

TE348 Whip the ends of a piece of rope to prevent fraying.

TE349 Teach two simple knots to someone else. Explain how they are used.

TE350 Create your own activity in knot tying.

TE351 Create your own activity in knot tying.

TE352 Create your own activity in knot tying.

HIKE AND CAMP OUT

Note: Adults must accompany you on hikes and camping trips.

TE353 Make a drawstring bag to use on camping trips.

TE354 Research and make a simple pack. Use it on a hike.

TE355 Demonstrate the proper clothing and equipment to wear on a hike. Do this with your group or camp unit.

TE356 Make a list of good safety and courtesy practices for hikers and campers. Discuss these with group members.

TE357 Share your rules for safety and good camping courtesy with your group before a camping trip.

TE358 Make an envelope or flip-flop bed roll. Pack it, roll it, tie it, and use it.

TE359 Pack, roll, tie, and use a sleeping bag.

TE360 Take a rain or snow hike with your group. Dress for the weather.

TE361 Go on a hike of a mile or more with your group. Take your lunch.

TE362 Sleep out in the backyard with your group.

TE363 Make a personal equipment list before you start on a camping trip. Follow it as you pack for your trip. Check it again as soon as you pack to return home.

TE364 Plan and go on an overnight camping trip. Cook your evening meal and breakfast outdoors.

TE365 Go on a camping trip with your family or group. Sleep in a tent for at least two nights in a row.

TE366 Go on a longer camping trip. Spend at least five nights camping out.

TE367 Help set up a trailer tent.

TE368 Be a good neighbor to another group, cabin group, or family camping group. Help clean up an area, provide wood for another fire, or cook a meal together.

TE369 Show how to select a good spot to place your sleeping bag or bedroll for sleeping on the ground. Choose a spot and sleep there all night.

TE370 Set up a tarp shelter.

TE371 Select a good location for a tent. With another person, erect a tent, take it down, and fold it properly.

TE371 Compare different kinds of tents. Learn about the advantages and disadvantages of various sizes, weights, and materials. Explain to your family or group what you have learned.

TE372 Show that you know how to adjust tent ropes during and after a rain.

TE373 Make an outdoor hand washing station with soap, water, and a washbasin.

TE374 Learn ways to keep food cool without ice. Use one of the methods on a camping trip.

TE375 Demonstrate two different ways of purifying water.

TE376 Plan and participate in some project to improve your campsite. Leave it better than you found it.

TE377 Go for a two-mile hike in an established park or campground. Pick up trash along the way. Dispose of it properly.

TE378 Participate in a local trail-building event held by an outdoor organization in your area such as the Washington Trails Association or the Evergreen Mountain Bike Alliance.

TE379 Draw a map of an outdoor place you visit often. Show on it the location of trees, plants, flowers, and shrubs.

TE380 Use a compass to find your way to a point at least one mile away.

TE381 Use a map to locate a trail. Follow it for a distance agreed upon by you and an adult. Do this with an adult.

TE382 Demonstrate two different ways to find the direction north.

TE383 Learn the difference between magnetic and true north.

TE384 Take and follow a bearing using a compass.

TE385 Play a game using a compass. Do this with at least three other people.

TE386 Look at a topographic map of your area. Find the highest and lowest points.

TE387 Be able to read and understand the many symbols used on a topographic map. Make a map of your neighborhood using these symbols.

TE388 Learn and practice proper overnight food storage on a camping trip. Why is it important to keep animals out of our food?

TE389 Go on a backpacking trip of at least one night with your group or family.

TE390 Go on a camping trip of at least one night where you canoe to your campsite.

TE391 Create your own hiking or camping activity.

TE392 Create your own hiking or camping activity.

TE393 Create your own hiking or camping activity.

TRAIL TO THE FUTURE**SCIENCE ADVENTURES**

TF100 Visit a science museum. Share something you learned with your group.

TF101 Enter a project in a school or community science show or science fair.

TF102 Read the science section of a newspaper for a month. Or, subscribe to and read a science magazine regularly.

TF103 Find out what fossils are. Collect several different fossils from your community. Ask your teacher where to look. What do the fossils tell you about the geological history of your area?

TF104 Start your own rock collection. Pick up interesting rocks where you live and where you travel. Label your rocks and display them.

TE105 Create your own science adventure activity.

TF106 Create your own science adventure activity.

TF107 Create your own science adventure activity.

CHEMISTRY

TF108 Set up your own chemistry laboratory for performing simple experiments. Ask your science teacher to suggest equipment you need.

TF109 Tour the chemistry lab at a local high school or college. Ask what safety measures are taken during experiments.

TF110 Visit a chemical laboratory. Interview a chemist about the work he or she does.

TF111 Fill one small glass with cotton. Fill another glass the same size with water. Very slowly pour the whole glass of water into the glass of cotton. All materials are made up on tiny specks called molecules. There are spaces between molecules. Because of these spaces, two glasses of materials can fit into one glass. Experiment with combining other materials besides cotton and water.

TF112 Choose a sheet of brightly colored construction paper. Collect some flat objects such as a key, a coin, a paper clip, or a pair of scissors. Lay the sheet of paper in strong sunlight with the objects arranged on top of it. After a couple of hours, remove the objects from the paper. See the shadow pictures left on the paper. The sun's rays break down molecules of dye. Make different designs using this method.

TF113 Stir a few drops of ink into half a glass of water. Pour in a few drops of laundry bleach and stir again. Watch what happens. Bleach whitens or gets rid of color by giving off oxygen.

TF114 Test for starch. Starch contains carbon, hydrogen, and oxygen. Get a bottle of iodine. Iodine turns purple when it touches things containing starch. Put a drop of iodine on small bits of mashed potato, apple, cereal, spaghetti, and sugar to see which have starch in them.

TF115 Observe the size and characteristics of bubbles. Make a bubble solution of your choice and create your own bubble wand. Experiment with different shapes of bubble makers to see which work best.

TF116 Make invisible ink. Slowly add two tablespoons of table salt to an equal amount of hot water. Break a toothpick in half. Dip the wide end in your ink. Write a message on a sheet of paper. Let the message stand for a half hour or until it disappears. Rub over the sheet of paper with the side of a soft lead pencil. The pencil lead will color the salt particles or pieces.

TF117 Do this experiment with an adult present. Put a balloon over the mouth of a plastic bottle. Place the bottle in a pan of water. Heat the pan of water until the expanding air inflates the balloon.

TF118 Make sugar crystals. With an adult present, let a cup of water come to a boil. Pour the water into a cup or mug. Slowly stir in $\frac{1}{4}$ cup sugar or more until no more sugar will dissolve in the water. Tie a string around a pencil. Lay the pencil across the cup so that the string hangs in the liquid. Allow one week for the crystals to form on the string.

TF119 Pour a tablespoon of vinegar into a glass of water. Add a tablespoon of baking soda. Drop three mothballs into the glass. Watch to see what the carbon dioxide gas you created does to the mothballs. You can also see carbon dioxide gas bubbles in carbonated beverages.

TF120 Discover why many fire extinguishers contain carbon dioxide. Do this with an adult present. Obtain a pint-sized jar with a lid. Pour one tablespoon of vinegar in the jar. Add one teaspoon of baking soda. Quickly cover the jar. When the bubbles stop forming in the jar, take the lid off. Light a wooden kitchen match. Lower the match into the jar.

TF121 Become a rainmaker. Do this with an adult present. Let water in a teakettle come to a boil. Put some ice cubes in a pie pan. Carefully hold the pie pan containing the ice cubes in the cloudy area just above the tea kettle's spout. When water vapor comes in contact with cold air, it turns from gas to liquid again, making rain.

TF122 Do this experiment with an adult present. Put a candle and its holder in your kitchen sink. Light the candle with a wooden kitchen match. Hold the burning match away from the candle while you quickly blow the candle out. Smoke will come from the candle's wick. Bring the burning match into the trail of smoke an inch or two above the candle. The candle relights because the smoke contains tiny drops of wax.

TF123 Observe how light affects the green color in leaves. Put a potted plant in a dark closet for a couple of days. Did any of the leaves change color? Next, cut two circles the size of quarters out of black construction paper. Pin the black circles above and below a live green leaf in a tree. After three days, look under the black patches. What color is under the patched spot?

TF124 Tie a clear plastic bag over the leaves and stem of a plant. Set the plant in the sun for several hours. Observe what happens on the inside of the bag. Explain.

TF125 Put a green leaf in the bottom of a small jar. Pour enough rubbing alcohol in the jar to cover the leaf. The chlorophyll, or green coloring matter in the leaf, dissolves in the alcohol. After an hour, what color is the liquid? Take the leaf out of the jar. What color is the leaf? In the fall and winter, deciduous trees stop making chlorophyll. What happens to the color of the leaves then?

TF126 Place pieces of moldy bread into four separate jars. Cover three of the jars. Put the uncovered jar and one covered in a warm, dark, cupboard. Put the third jar in a refrigerator and the fourth in direct sunlight. Compare and explain the growth of the mold after several days.

TF127 Find out how plants use light, heat, water, oxygen, and carbon dioxide to produce their own food. Make a poster that explains the process and explain it to your group.

TF128 Create an activity using chemistry.

TF129 Create an activity using chemistry.

TF130 Create an activity using chemistry.

PHYSICS

TF131 Collect a variety of objects. Put them in water. See which float and which sink. Record your results.

TF132 Bend a piece of wire hanger back and forth at one point. After several bends, feel the wire. It is hot because of friction. Experiment with other ways of producing heat through friction.

TF133 Sprinkle a small amount of talcum powder or cornstarch a few inches above a light bulb that is not lit. Notice what happens. Turn on the light bulb. Let it get hot. Sprinkle again. What does hot air do?

TF134 Find two objects to drop—a heavy object and a light one, such as a rock and a paper clip. Stand on a chair. Drop the two objects at the same time. Did they reach the ground at the same time?

TF135 Bend light rays. Fill a glass half full with water. Set a spoon in the jar at a slant. Hold the glass so that your eyes are level with the water line. Describe how the handle of the spoon looks. Light reflected from the spoon is bent as it goes from the air into water.

TF136 Place a small square of heavy cardboard on top of a drinking glass. Put a coin on top of the cardboard. Flick the cardboard from under the coin. The coin falls into the glass because of inertia. Experiment with other items to see how they fall into the glass.

TF137 Fill a small bucket half full of water. Hold onto the bucket's handle. Keep your arm straight and swing the bucket up and around in a circular motion. The water stays in the bucket even when it is upside down because of centrifugal force.

TF138 Make bottle top gears. Collect three bottle caps that are not bent. Use the kind of cap that must be removed by a bottle opener. Punch a hole through the center of each cap with a nail. Place them next to each other on a block of wood so they are touching. Put thin nails through the center holes. Tack them into the wood but allow the caps to still turn. Compare your gears with the gears of an eggbeater, clock, and bicycle.

TF139 Cut a rubber band in two and tie one end to a support. Stretch the rubber band and pluck it with one finger. Pull it tighter and pluck it again. Note the change in pitch. Read about pitch and report your findings to the group.

TF140 Read about X-rays and how they are produced. Visit a doctor's office, a dentist's office, or a hospital to observe how X-rays are taken.

TF141 Read about cosmic rays and find out where they come from. With a magnifying glass, look at the radium dial of a watch in a dark room.

TF142 Stuff a large handkerchief into an empty jar. Be sure that the handkerchief will not fall out when you hold the jar upside down. Fill a dishpan or pot with water. Holding the jar upside down, lower it deep into the water. Hold it there for a minute or more. Lift the jar out of the water. Feel the handkerchief. It stayed dry because air took up space in the jar and kept it from filling up with water.

TF143 Blow up two identical balloons so they are the same size. Cut two pieces of string the same length. Tie a string around the knot of each inflated balloon. Hang the balloons a few inches apart and blow between them. The balloons move together because you have decreased the air pressure between them.

TF144 Tie a string around the center of a yardstick or meter stick. Suspend the stick by the string until it hangs level. Blow up two small balloons so that they are the same size. Tie one balloon to one end of the stick and one balloon to the other. Adjust the balloons until they hang at the same level. Allow air to escape from one balloon. Notice that the balloon filled with air is heavier than the empty one.

TF145 Hold a raw white potato on a flat surface such as a table. With a quick, sharp motion, stab the potato with a plastic straw (caution: avoid your hand!). The straw should go through the potato. Try slower motions and compare the results. Write down the results and what you think causes them.

TF146 Find out how gemstones are formed. Begin your own collection of gemstones.

TF147 Look at a bottle of warm carbonated beverage. The beverage is similar to magma because it is a liquid that contains gases. Open the bottle. What happens to the gas in the beverage when the pressure in the bottle is released? What forms at the top of the liquid? What you see is similar to volcanic lava. Using an encyclopedia, find out what kinds of lava may be formed by a volcano.

TF148 Find out how igneous rocks are formed. Do this with the help of an adult. Slowly heat a tablespoon of powdered sulfur until it is a dark red liquid. Pour the melted sulfur into a paper cup of cold water. After the sulfur has cooled and hardened, look at it closely.

TF149 Remove the front wheel from a bike and get a 3 foot long string. Attach the string to a part positioned perpendicular to the center of the tire. Stand on a chair, hold on to the free end of the string, have someone spin the tire, then move the tire to its upright vertical position, observe what happens. If you don't have access to the materials, watch a video online. This is a gyroscopic effect, meaning that a spinning object wants to rotate about its axis. This is similar to the way Earth keeps rotating on its axis.

TF150 Research Newton's laws of motion. First, observe a ball at rest. Next, roll a ball across a smooth floor and observe it. Next, roll that same ball across the same floor, but put your foot in front of it. What happens then? How do these short experiments demonstrate the laws of motion?

TF151 Read about the many different types of energy. Hold a bouncy ball at eye-level. What kind of energy does it have right now? Drop the ball. What kind of energy does it have as it's falling? Observe the ball as it bounces back up. Does it reach its starting height? Why not?

TF152 A ramp or inclined plane is a type of simple machine. Make your own ramp using a piece of cardboard. Roll a toy car or ball down your plane. Change the angle of your ramp by raising or lowering the higher end. How does altering this angle affect the speed with which your object travels? Why do you think this happens?

TF153 Create an activity using physics

TF154 Create an activity using physics

TF155 Create an activity using physics.

MATHEMATICS

TF156 Keep a record of the number of hours you watch television in one week. Figure out the average amount of time you spend watching television each day. Do this by dividing the total number of hours watched in one week by the number of days in a week.

TF157 Measure your height and weight at least once a week for 12 weeks. Record the measurements on a graph.

TF158 Record the temperatures on an outdoor thermometer each day at 8 a.m. and 4 p.m. (or some other consistent time in the morning and evening) for one week. Graph your daily readings.

TF159 Record the price of a favorite fresh fruit or vegetable at the grocery store for a four-week period. Compare the prices using a graph. Why do prices usually change? Ask the produce worker at the grocery store.

TF160 Make a shopping list of eight grocery items. Choose two stores in your community. Price the identical items at both stores. How much money would you save on your total bill by shopping at one store rather than the other?

TF161 Measure the length and width of a room in your home. Determine the area of the room by multiplying its length by its width. Your answer will be in square units.

TF162 Record the odometer reading in the family car or truck every day for one week. Calculate the daily mileage and the weekly total traveled.

TF163 Look at your favorite cookie recipe. Determine the measurements of each ingredient if you doubled the recipe.

TF164 Determine how many words you read in one minute. Pick out a book. Have a friend time you reading for two minutes. Count the number of words you read. Divide the total by two to figure out your average reading speed in one minute.

TF165 Determine your typing speed. Pick out a magazine or newspaper article. Have a friend time you typing the article for two minutes. Count the number of words you typed. Divide the total by two to figure out your average typing speed in words per minute (wpm).

TF166 Figure the average height of members in your group or family. Measure each person's height and write it down. Add all heights together and divide the total by the number of people measured.

TF167 Learn how to use the produce scales at your grocery story. Weigh at least two kinds of fruit or vegetables which sell 'by the pound.' Figure out how much each portion would cost if you bought it.

TF168 Cook or order a pizza. Before eating it, calculate the circumference and area of your pie. Take a slice. Before eating it, estimate the area and perimeter of your piece.

TF169 Create an activity using math.

TF170 Create an activity using math.

TF171 Create an activity using math.

WATER

TF172 Leave a lettuce leaf out in the air for several days. How does it change in appearance? Lettuce, like most other green vegetables, is 95% water. What do you think happened to the water in the lettuce leaf? Soak some slightly wilted lettuce in a pan of water and watch what happens.

TF173 Find out what percentage of the human body is water. Research how humans use the water in their bodies and how much water the average person needs per day.

TF174 Visit your local water utility service. Describe to your group the source, quality, and amount of water needed for your community.

TF175 Place a quarter cup of tap water in a glass. Allow it to evaporate. Is anything at

all left in the glass? Next, look at the inside of an old teakettle. Take a flashlight and look up inside your water faucets. The white rings or deposits you see are minerals that dissolved in the water when it flowed through the soil.

TF176 Find out all you can about minerals in the sea. Learn how scientist are working to make them available and useful to people. Describe what you learn to someone else.

TF177 Learn about a few oceanography explorations taking place at this time. Look on the Internet or ask a librarian to help you find resources.

TF178 Visit locks on a river or lake and watch a boat go through them. Describe to someone how a lock works.

TF179 Learn how the earth stores its supply of water. Use the Internet or ask your teacher to help you find information on ground water and the earth's water table.

TF180 Make a model of the earth's water table. You need a cardboard tube from a paper towel roll, a 9"x 13"x 2" clear glass baking dish, sand, and water. Hold the tube in the center of the dish. Fill the area around the tube with sand. The sand should be about one-half inch deep. While holding the tube, slowly pour water over the surface of the sand until all sand is wet. Look at the bottom of the dish through the tube. You should see water. Look through the side of the dish and see the water line. What you see below the line is similar to the earth's water table. The tube is like a well.

TF181 Find out how much precipitation your area normally gets in a year. How

much of this comes as rain and as snow? Keep track of precipitation in your area for one month. Do this by reading the newspaper's weather section, watching the weather report on the local news, or looking it up online. Describe what you find to someone else.

TF182 Fill a jar with water. Put a piece of cardboard over the top of the jar. Put a small cardboard box in the freezer. Set the covered jar of water inside it. Allow the water in the jar to freeze solid. What happened to the cardboard on top of the jar? What would have happened if you had put a tight cap on the jar?

TF183 Demonstrate the effect of temperature on evaporation. Pour a small, equal amount of water in two identical pans. Place one pan near a heating vent, radiator, or in the sun. Place the other in a cool place. Check regularly until all water is gone in one pan. Water evaporated from which pan first?

TF184 Remove the label from an empty can. Fill it with ice cubes. Add water and a few drops of food coloring to the can. Let it stand on a table for a short time. What do you see on the outside of the can? Are they colored? This is known as water condensation. The water drops come from the cool air around the can.

TF185 Determine if different surface areas of water affect the amount of evaporation. Pour one cup of water into a wide, flat dish and another in a tall glass. Place both in direct sunlight for one day. Measure how much water remains in each container.

TF186 Make a snow gauge. Choose a large, wide-mouthed can. Run a strip of white adhesive tape down the side of the can.

Mark inches and half inches on the tape. Put the gauge onside in an open area when snow is expected. Measure the snow collected in the can.

TF187 Scoop ten inches of snow into your snow gauge. Let it melt. How many inches of water are left? Generally ten inches of snow equal one inch of water.

TF188 Fill a glass jar with cold water. Fill an identical jar with hot water. Add a few drops of food coloring to the jar containing hot water. Cover the cold water jar with a piece of cardboard; turn it upside down over the other jar in a sink. Make sure the mouths of the jars line up evenly. Carefully pull the cardboard out. Observe how the cold water sinks and the hot water rises. This same phenomenon happens in our oceans.

TF189 Produce your own ocean waves. Fill a large container such as a dishpan with water. Wait until the top of the water is smooth. Float a cork in the middle of the water. Put your mouth nearly level with the water. Blow in different ways-short puffs and strong, steady puffs. What happens to the cork?

TF190 Determine if ships can carry a heavier load in river water or salty ocean water. Fill two containers with water. Dissolve table salt in one of the containers until no more will dissolve. Compare the loads of sand a toy boat can carry in the unsalted 'river' water and the salty 'ocean' water.

TF191 Learn about the surface tension of water. Using a table fork as a carrier,

carefully place a needle on the surface of water in a dish. The needle will float even though it is denser than the water it displaces. Dip a piece of soap in the dish. Soap reduces surface tension. What happens to the floating needle?

TF192 Make a Cartesian diver. You will need an empty 1 or 2 liter plastic bottle, a small plastic pipette, scissors, and a hex nut. Fill the bottle with water to the brim. Cut the thin length of the pipette off, leaving 2 cm before the bulb. Fit the nut to the bottom of the cut pipette. Float the pipette in the bottle and close the lid. Squeeze the bottle and let the pipette sink. Letting go of the bottle should allow the pipette to rise. Why does this happen? Squeezing the bottle exerts pressure and forces some water into the stem of the pipette. Releasing the bottle reduces the pressure on the pipette and lets the air inside of it expand.

TF193 Learn about liquid density. For this experiment you will need corn syrup, water, vegetable oil, food coloring, and three glasses. Pour a quarter cup of each liquid into its own glass jar. Put two drops of food coloring into each liquid, making sure each liquid has its own color. Swirl each glass. Carefully pour the corn syrup into the water. Now add in the vegetable oil. What happened? Dense liquids will sink to the bottom which the less dense liquids will rise to the top.

TF194 Create an activity using water.

TF195 Create an activity using water.

TF196 Create an activity using water.

TF197 Visit a weather station or TV station and learn how the weather is predicted.

TF198 Visit a local observatory to look at the moon through a telescope. What new things did you learn?

TF199 Read about hot air balloons and how they work. Visit a hot air balloon show. Observe the different sizes of balloons, distances, and weight of the balloons.

TF200 Read about the space program. Make a list of products we use daily which have resulted from space research.

TF201 Read about space projects. Share the most interesting facts with the group.

TF202 Read about America's first woman astronaut. What was her name and what year did she make her first flight into space?

TF203 Read about Charles Lindbergh, Orville and Wilbur Wright, or Amelia Earhart. Report your findings to the group.

TF204 Visit an aerospace museum. Share the most interesting facts with the group.

TF205 Draw or paint pictures showing important historical events in aviation.

TF206 Make a picture book of airplanes that have different purposes or uses. Label each plane by name.

TF207 Figure out how much you would weigh on the moon. The moon's gravity is about one-sixth of the earth's gravity. Record your weight and divide it by six.

TF208 Find two marbles that are the same size. Put one marble on the floor across the

room. Hold the other marble close to your eyes. Which marble looks bigger? Why does the moon look so much bigger than the stars?

TF209 Obtain two identical sheets of paper. Crumple one up in a ball. Drop the two pieces of paper at the same time. Observe the effect of air resistance on the flat sheet of paper. How does it affect the rate of fall?

TF210 Make two stacks of books about 18" high. Suspend a piece of notebook paper loosely between the two piles of books. Blow across the top of the paper to demonstrate 'lift.'

TF211 Thread a piece of lightweight wire through a straw. Tie the ends of the wire to objects on either side of a room. Make sure the wire is taut or tight. Inflate a balloon. Tape the sides of the balloon to the straw. Release the air from the balloon. Watch its movement. The escaping air provides 'thrust.'

TF212 Collect lightweight materials: cotton, hair, dandelion seed, or milkweed seed, etc. On a breezy day, let the items float away in the wind. Humans used lightweight craft for flight. Can you name some of these?

TF213 Study a helicopter seed, like that from a maple tree. Design your own helicopter seed using cut paper and a paperclip (to represent the seed). Experiment with a few different designs and drop them from a height of at least 10 feet. Observe them as they fall. Which design do you think would spread the trees seeds the best?

TF214 Give or write a brief biography about an astronaut or other space scientist. Be sure not to copy it word-for-word from a book or the Internet.

TF215 Watch a man-made satellite in the sky. Report the location where it first appears and the direction in which it moves. Tell in what ways a satellite is an aid to science.

TF216 Ask your teacher or librarian to help you find directions for building a simple sundial. Build one. Show your sundial to others and explain how it works.

TF217 Make a 'pictionary,' using pictures to explain aerospace terms. Draw pictures or collect them from old magazines.

TF218 Read about Skylab, the experimental space station. Write a story about life aboard Skylab. Or read about the International Space Station and write about life aboard it.

TF219 Choose five items you would send to an inhabitant of another planet. Write a

letter to the inhabitant explaining the use of each item. Explain why you chose each item.

TF220 Pretend you are a passenger on a space shuttle. What will you do when you get to your destination? Write a story about it.

TF221 Make a list of space-related terms. Create a crossword puzzle using the terms. Let a friend solve the puzzle.

TF222 Read about Katie Bouman, whose research allowed us to view an image of a black hole. Write a summary her work and the study of black holes. Present your findings to your group.

TF223 Read about the Mars rover, Opportunity, and plans for future rovers. Present your findings to your group.

TF224 Create your own air and space activity.

TF225 Create your own air and space activity.

TF226 Create your own air and space activity.

ENERGY

TF227 Read about windmills. What have windmills been used for in the past? What are they used for in the present?

TF228 Observe a windmill in operation. Interview its operator, a scientist, or engineer to find out more about how it works.

TF229 Visit a local utility company such as the gas company or the electric company.

Find out how energy in the form of gas or electricity reaches your home.

TF230 Visit a power dam or collect pictures and information on power dam. Exhibit your information and materials.

TF231 Visit an oil or gas field. Find out how the product is removed, transported, sold, and used.

TF232 Find out how nuclear energy is generated. Visit a nuclear power plant if possible.

TF233 Demonstrate that evaporation causes a decrease in temperature. Dampen the back of your hand with a few drops of rubbing alcohol or water. Feel the cooling sensation. Fan the dampened area. Observe that fanning increases the speed of evaporation and decreases the temperature. Experiment with different kinds of liquids to find out which one evaporates the quickest. Explain how people can use the cooling effect of evaporation on a hot summer day.

TF234 Produce static electricity. Blow up a balloon. Rub it against a piece of wool cloth. What happens when you hold the balloon close to your hair? Or, try a piece of dry lightweight cereal.

TF235 Put an equal amount of ice into two small juice glasses. Place one of the glasses in a larger glass jar and cover the jar with a lid. Compare the time required to melt the ice in each glass. How is the larger glass jar like a storm window or storm door?

TF236 Interview a person at least 70 years of age to find out the answer to the question: "What different kinds of energy did you use when you were my age?" Consider things such as lighting, heating, transportation, and refrigeration.

TF237 Interview an electrician. Make an appointment ahead of time. Prepare a list of questions to ask the electrician. For example, you might want to ask if there are any dangers when working with electricity.

TF238 Interview an electrical engineer about their job. Plan ahead and make an appointment with the engineer. Prepare a list of questions you would like to ask. For example, you might want to know what

responsibilities the engineer has or what training is required for this career.

TF239 Find out how a fossil fuel such as coal, oil, or gas is formed. Make a poster to show how it is created. Find out how long the supply of fossil fuels is likely to last.

TF240 Find two identical metal cans. Paint one with flat black paint. Polish the outside of the other one with steel wool. Place equal amount of water in both cans. Place the cans in sunlight. Record the temperature of the water in each can several times during the day. Which metal can heated up faster and why?

TF241 Test insulation materials. Fill two small jars with water of the same temperature. Set one inside a larger container. Place both in the sunlight. During the day, record the temperature in the water. IN the next few days, repeat the experiment, changing one thing. Fill the air space between the small and large container with different materials such as sawdust or sand.

TF242 Discover the heat of radiation. Do this experiment with an adult present. Put a piece of black construction paper on the ground in direct sunlight. Focus sunlight through a magnifying glass onto the black paper. Be careful! The paper may burst into flame.

TF243 Get a booklet from your electric service company that explains how to read your electric meter. Read your electric meter every day at the same time for one week. Record the number of kilowatt-hours

used each day. Figure the total number of kilowatt hours used in one week.

TF244 Imagine how different your life would be if electricity had not been discovered. Write a story that describes a day in your life without electricity.

TF245 Tour a plant or factory that assembles or makes planes, cars, trucks, railroad cars, or other vehicles. Describe to someone else what you learned.

TF246 Travel by plane, train, or boat. Observe all you can about the vehicle's construction and operation. Give a report or write a log of your trip.

TF247 Read about the usefulness of the space shuttle as a transportation system. Report your findings to the group.

TF248 Tell some legends or stories about humans' early attempts to fly. Or, tell stories about the early history of the railroads, automobiles, power ships, submarines, or space capsules.

TF249 Go on an excursion to a dock or freight wharf. Observe workers and machines at work. Explore the interior of a cargo or passenger vessel if possible.

TF250 Visit a lighthouse or airport. Find out how beacons work. Describe to someone what you learned.

TF251 Find out about rapid rail mass transit systems. Rapid rail systems are found in San Francisco, Chicago, Boston, Philadelphia, Washington, D.C., Atlanta, New York, and elsewhere. What are the advantages of these systems in large cities? What are the

disadvantages? How could Seattle benefit from a better transit network?

TF252 Visit a city with a mass transit system if you do not live in a city that has one. Get a map showing the mass transit routes. Pick a destination. Travel to your destination using the mass transit system.

TF253 Keep a journal of all your uses of transportation for one week. Decide if you can cut back on your use of the kinds of transportation that use limited energy sources such as gasoline.

TF254 Pretend you are going from your hometown or the biggest city near you to another city in the U.S. Find out the time and cost to make the trip by bus, train, and airplane. Which is the cheapest means of transportation? How long will it take to make the trip using these different methods of transportation?

TF255 Look at a road map of your state. Identify one or more U.S. highways or interstates that go through your community. If your community does not have a U.S. highway or interstate, locate the one nearest you. List several other communities located on these U.S. highways or interstates. Figure out how long it would take to travel to these towns. Use the mileage scale on the map.

TF256 Go on Amtrak's website. Look at a map that shows you where its trains run. Mark the route of a trip you would like to take. Figure out the cost of the trip on Amtrak.

TF257 Interview a car salesperson. Find out what kind of safety equipment has been added to automobiles over the years. Has gas mileage and emissions improved in vehicles?

TF258 Visit a building with solar panels or visit a solar farm. What are the advantages and drawbacks to this form of energy? How

has the price of solar panels changed over the past 10 years?

TF259 Create an activity to learn more about energy.

TF260 Create an activity to learn more about energy.

TF261 Create an activity to learn more about energy.

SKY AND STARS

TF262 Read about clouds. Draw pictures of different types of clouds. Use white chalk or crayon on blue paper. Label each cloud type.

TF263 Draw a picture of the rain cycle. Show what causes rain to fall, what happens to rain when it hits the earth's surface and how moisture returns to the atmosphere again.

TF264 Make a weather station in your backyard with a rain gauge and barometer. Record the daily rainfall, temperature, and sky conditions for two weeks.

TF265 Find the weather page in your newspaper or look up the weather online. Keep a record of the temperature in different sections of the country for a week. Point out the changes and differences.

TF267 Explain the formation of rainbows, rings, around the moon, and the colors of a sunset. Draw a picture of one of these that you observe.

TF268 Read about the North Star or Pole Star. Learn about old stories people told about this star. Know how to locate it in the sky.

TF269 Make a sketch of the Big Dipper, the North Star, and the horizon line early some evening. Six hours later on the same night, do the same thing again. Record the date and time of each sketch. Compare your sketches. Explain any changes.

TF270 Find a dark room for your experiment. Pretend that your flashlight is the sun. Imagine that a basketball or soccer ball is the earth. Shine your flashlight directly on the ball. Have a friend turn the ball or 'earth.' See how the day follows the night for people living in different parts of the world.

TF271 Draw the planets on a chart to show their relative size.

TF272 Define the following words: asteroid, meteor, comet, and shooting star. Explain the terms to your group.

TF273 Visit a business or home which uses solar energy or geothermal energy as a source of heat. Have someone explain to you how the system works.

TF274 Invite a local utility representative to your group to discuss ways to conserve

energy at home. Make a list of questions to ask.

TF275 Read the most current research on how scientists believe the dinosaurs died. Write a summary and present your findings to your group.

TF276 Learn the difference between a constellation and an asterism. Find an example of each.

TF277 Study the different cloud types and learn what each type tells you about the

coming weather. Make a chart to display the information you collect.

TF278 Create your own activity to learn more about the sky and stars.

TF279 Create your own activity to learn more about the sky and stars.

TF280 Create your own activity to learn more about the sky and stars.

BUSINESS

TF281 Compare the price of two different brands of the same product. Check quantity, ingredients, and claims made about each product. Tell why you would decide to buy one brand and not the other. Optional: buy both and compare. Did your expectations hold up?

TF282 Request information from three different stores about an item you are interested in buying. Make a chart before you start to record your information. Decide which store you would probably purchase from.

TF283 Find out about taxes in your community. Compute the sales tax for three items of different prices.

TF284 Make a reservation for your group or family at a restaurant. After the meal, figure the tip and pay the bill.

TF285 Write a business letter to request information about a product or service. Use correct style and state your request clearly.

TF286 Write a business letter stating your opinion on a product or service. Use correct business style and state your stance clearly.

TF287 Buy a product that includes a manufacturer's rebate coupon. Send in the coupon for your rebate, following the instructions for what to include to get the refund.

TF288 Learn about mailing packages from various sources such as UPS, US Postal Service, and Federal Express. Are the costs different? Why? Make a chart comparing the sources using a computer.

TF289 Buy an item from a mail order catalog. Fill out the order form with the correct information. Check your order when it arrives.

TF290 Fill out and send in the warranty or purchase registration card for an item you or your family purchases. Write down all of the requested information and keep a copy of the warranty and purchase receipt.

TF291 Swap your services for something you want. Make a deal with a family member, neighbor, or friend to do a certain amount of work in return for an item or a privilege. Write up your agreement and have both parties sign it. Follow through on your agreed work.

TF292 Clip coupons from magazines and newspapers. Organize them in a file so you can find what you need. Use coupons on several different shopping trips.

TF293 Compare prices between convenience stores and full line grocery stores. Look at the prices for ten food items your family uses frequently. Decide which is the best place to buy certain foods. Share this information with your family.

TF294 Visit a food cooperative. Find out how it operates. Compare prices with the grocery store your family regularly uses.

TF295 Compare prices for three different brands of the same food at the same grocery store. Help select foods for your family or a group outing that are most economical.

TF296 Watch television at different times of the day for one week. Record what kinds of products are advertised at different times such as prime time evening hours, Saturday mornings, and weekday afternoons. Decide whom you think the advertisers are trying to get to buy their products.

TF297 Write and illustrate your own ad for a product you use. Include the information you would like to know about a product before you buy it.

TF298 Review your purchases over the past month. Describe which purchases were good choices and which were less than satisfactory. Discuss with your group how you can make better choices as a consumer.

TF299 Imagine that you have \$500 to spend. Go to a store and choose the items you would buy. Add up the prices of all your purchases, add sales tax, and see how close you can come to exactly \$500.

TF300 With your parents' permission, order something off the internet. Explain the safety procedures.

TF301 Serve on the purchasing committee for a group event. Make a shopping list of the supplies needed for the event. Know how much you have to spend. Keep receipts of all your purchases. Make a financial report to your group.

TF302 Write a business plan for your group's candy sale.

TF303 Create your own activity to learn more about business.

TF304 Create your own activity to learn more about business.

TF305 Create your own activity to learn more about business.

COMMUNICATIONS

TF306 Visit a radio or television station. Have an engineer explain how the station receives and transmits programs.

TF307 Visit a telecommunications company or do research online. Learn how calls are made. Explain to your group how cell phones transmit calls.

TF308 Visit an amateur radio station or ham radio operator. Find out about the broadcast frequency. Look at the ham operator's log.

TF309 Ride with someone whose car or truck is equipped with a CB (Citizen's Band) radio. Learn the usefulness of a CB. Listen to them talk to someone over the CB using

some of the CB slang. Talk in CB slang with members of your group.

TF310 Learn Morse code. Make up some messages in code. Teach these to a friend. Use flashlights after dark to send each other messages.

TF311 Learn about letter flags on ships. Spell your name using letter flags.

TF312 Prepare and tape record a mock radio broadcast with homemade mechanical sound effects. Play your broadcast for your group.

TF313 Write and then send a telegram to a friend or relative.

TF314 Make a crystal radio set.

TF315 Listen to a podcast and then record your own on a topic that you find interesting.

TF316 Learn Braille and use it to write a message to one of your friends.

TF317 Learn at least 10 signs in American Sign Language (ASL) or learn to sign along to a song.

TF318 Create an activity to learn more about communications.

TF319 Create an activity to learn more about communications.

TF320 Create an activity to learn more about communications.

ARCHERY

TF321 Learn about the U.S. National Archery Association and their services and information it provides.

TF322 Learn and demonstrate safety rules and precautions for archery as they apply to your equipment, your audience and yourself.

TF323 Learn and demonstrate the parts of the bow and arrow. Explain the scoring values of different colored circles on the target.

TF324 Learn and demonstrate the proper method of drawing arrows from the target and scoring.

TF325 Learn and demonstrate how to find the point of aim. Tell why your aim changes

as you move toward or away from the target.

TF326 Learn two ways to determine your eye dominance. Determine which of your eyes is dominant and help a friend to do the same.

TF327 Create and use an archery target that you made.

TF328 Attend a local archery competition.

TF329 Earn any of the ratings recognized by the U.S. National Archery Association.

TF330 Participate in an archery competition or tournament.

TF331 Learn the proper way to set up an archery course. Help an archery instructor set one up.

BATON TWIRLING

TF332 Learn about the U.S. Twirling Association and the services and information it provides.

TF333 Learn and demonstrate the correct way to hold a baton

TF334 Learn and demonstrate three basic twirls.

TF335 Learn two new baton throws.

TF336 Create and perform a baton twirling routine.

TF337 Join a baton twirling team or flag line and practice with this team for at least a month.

TF338 Participate in a baton twirling competition, talent show, or performance.

TF339 March in a parade with your baton as an individual, a pair, or with your team.

CYCLING, BMX, AND MOUNTAIN BIKING

TF340 Learn about the U.S. Cycling Federation and/or the American Bicycling Association and the services and information they provide.

TF341 Learn and demonstrate your ability to maintain your bike in proper working order.

TF342 Learn and demonstrate how to make minor adjustments and repairs such as raising seat and handle bars, changing a flat tire, patching an inner tube, and mounting a chain, and oiling bike parts.

TF343 Create a chart explaining the differences between a mountain bike, BMX, and different kinds of racing bicycles.

TF344 Learn and demonstrate five important safety practices for bike riding.

TF345 Learn about different kinds of helmets and demonstrate how to fit a helmet. Learn what it means for a helmet to be MIPS certified. Upgrade your helmet to a MIPS helmet, if possible.

TF346 Learn about different kinds of safety equipment used in mountain biking, BMX racing, and other kinds of racing bicycles.

Use the correct safety equipment at all times.

TF347 Participate in a bicycle project at your school or in your community.

TF348 Help organize a bicycle project or event at your school or in your community.

TF349 Participate in a cycling, mountain bike, or BMX competition.

TF350 Set a goal and practice to meet that goal to improve your time or performance.

TF351 Participate in a trail-building event that focuses on building and maintaining bike trails.

TF352 Ride the same trail or course at least 5 times over a period. Set a goal for improving on that route and work toward meeting it.

TF353 Research and make a list of practices that make for good trail etiquette. How should bikers yield? What should you say to each other in passing? When should you not ride a trail?

BOWLING

TF354 Learn about the American Bowling Congress and/or U.S.A. Bowling and the services they provide for amateur bowlers.

TF355 Learn and demonstrate how to select and fit a bowling ball.

TF356 Learn and demonstrate how to score a game of bowling and keep score for several games.

TF357 Demonstrate how to approach the foul line and deliver the ball. Do this correctly several times.

TF358 Set a goal to improve your score in bowling. Practice to meet this goal.

TF359 Participate in a bowling tournament.

CHEERLEADING

TF360 Learn about the American Association of Cheerleading Coaches and Advisors and the services and information they provide.

TF361 Learn and demonstrate five important safety practices when working with throws, catches, and pyramids.

TF362 Learn and practice three new cheerleading jumps or other stunts.

TF363 Make up an original routine to the words of a favorite cheer. Practice your routine until you can perform it easily.

TF364 Teach a cheerleading routine to some friends. Practice the routine together until all can perform it as a team.

TF365 Attend an organized cheerleading clinic or participate in a cheerleading competition.

GOLF

TF366 Learn about the American Junior Golf Association and the services and information they provide youth.

TF367 Complete a beginning golf class from a golf club or community school program.

TF368 Learn and demonstrate the parts of the golf club and different kinds of golf clubs and their uses.

TF369 Learn how to score a golf game, and keep score for several games.

TF370 Practice putting at a miniature golf course or putting green.

TF371 Practice regularly at a driving range.

TF372 Set a goal to improve your golf score. Practice regularly to meet your goal.

TF373 Research the history of the game of golf. How has the game of the equipment changed over the years? Explain what you have learned to an adult.

TF374 Caddy for several golf games and learn the job duties of a caddy.

TF375 Attend a golf tournament in your area.

GYMNASTICS AND YOGA

TF376 Demonstrate several stretching and limbering exercises to use before participating in gymnastics. Do these regularly.

TF377 Learn the proper way to spot several gymnastic stunts. Be a spotter several times.

TF378 Demonstrate your ability to perform correctly three tumbling skills, such as forward or backward rolls, handstand, cartwheel, or handspring.

TF379 Learn two basic stunts on a piece of gymnastics equipment. Make sure a spotter is present.

TF380 Make up a gymnastics routine. This might be a tumbling or floor exercise routine or a routine performed on a piece of equipment.

TF381 Perform three stunts on a trampoline. Make sure a spotter is present.

TF382 Learn 10 different yoga poses and do them one after another.

TF383 Attend a yoga class and follow along with the instructor.

TF384 Learn about the different types of yoga and experiment with them to find out which type you enjoy the most.

TF385 Invent three new yoga poses of your own. Give them all names.

HORSEMANSHIP

TF386 Choose at least two breeds of horses and do research to find out more information about the history and modern uses of the breed.

TF387 Learn and demonstrate how to distinguish several breeds of horses.

TF388 Create and share a display with pictures about horses describing their appearance, traits, characteristics, and special uses.

TF389 Learn and demonstrate how to approach, catch, lead, and tie a horse.

TF390 Learn and demonstrate how to saddle and bridle a horse.

TF391 Mount and ride a horse. Use a walking gait for at least 100 yards and then dismount.

TF392 Learn and wear appropriate safety protection when riding.

TF393 Learn and demonstrate how to feed and water a horse.

TF394 Learn and demonstrate proper grooming techniques.

TF395 Learn and demonstrate how to figure the height of a horse by “hands.”

TF396 Learn about trail riding, what to bring on a trail ride, and locate two good trails in your area for a trail ride.

TF397 Participate in an event at a horse show.

TF398 Come up with your own activity involving horses or another large mammal.

SKATING

TF399 List important safety rules for in-line skating, skateboarding, or ice-skating. Demonstrate the proper care and storage of skates and board.

TF400 Learn what protective equipment should be worn for in-line skating or skateboarding. Wear the equipment when you skate or skateboard.

TF401 Demonstrate your ability to skate forward and backward and stop on ice-skates of in-line skates.

TF402 Learn to go in a straight line and to turn on a skateboard. Practice until you can perform these skills easily.

TF403 Skate forward and backward in dance position with a partner either using ice-skates or in-line skates.

TF404 Perform two ice-skating, in-line skating, or skateboarding stunts.

TF405 Participate in an in-line skating, skateboarding, or ice-skating show, competition, or demonstration.

TF406 Play two games on ice skates or in-line skates.

TF407 Put an ice-skating routine to music. Perform your routine for friends, family, or your group.

TF408 Show a younger child basic ice-skating, in-line skating, or skateboarding skills.

TF409 Help plan and carry out a party where everyone has an opportunity to skate or skateboard. Be sure everyone observes and practices the safety rules.

TF410 Learn two skateboard stunts that are new to you. Practice them until you can perform them with ease.

SKIING AND SNOWBOARDING

TF411 Demonstrate how to maneuver downhill on skis or a snowboard. Show how to stop, traverse, step up a slope, and turn around in place.

TF412 Ski down a slope using correct techniques. Make several connected snowplow, wedge, or parallel turns. Do this several times.

TF413 Learn the meaning of trail markers telling the difficulty of different slopes. Learn how to read a trail map.

TF414 Ski cross-country using correct techniques for different kinds of terrain, including skiing on the flat, uphill, and downhill.

TF415 Demonstrate how to care for ski or snowboard equipment. Explain how to fit equipment to our size and skill level.

TF416 Wax or own skis or snowboard. Do this several times. Demonstrate your knowledge of what wax to use for different snow conditions.

TF417 Act out what to do for an accident of emergency while skiing or snowboarding. Know about the proper clothing to wear for downhill or cross-country skiing.

TF418 Learn about the organization Protect our Winters (POW) and the work they do to fight climate change. Watch a video about the organization's founder, Jeremy Jones, and the backcountry snowboarding he does.

TF419 Learn about avalanche and snow safety. Make a poster telling avalanche warning signs and what to do in the event of an avalanche.

TRACK AND FIELD

TF420 Set a goal to improve your performance in a track or field event. Record your times or distances. Practice regularly to meet your goals.

TF421 Demonstrate the proper method to warm up and cool down before and after a track or field event.

TF422 Participate in a track and field event. Compete in or help run the competition.

TF423 Compete in a run open to the public such as a 5K, 10K, or fun run.

TF424 Volunteer to help at a checkpoint or finish line for a race.

TF425 Learn skills required in two different track events.

TF426 Learn skills required for two different field events.

TF427 Learn about triathlons in your area. Observe one.

TF428 Participate in a triathlon.

BADMINTON

TF429 Know the rules for playing and scoring badminton. Play several games observing these rules.

TF430 Demonstrate the correct way to serve in badminton. Serve several times using proper technique.

TF431 Put up a badminton net and mark off the playing court correctly. Take down the net after playing and store properly. Do this several times.

BASEBALL AND SOFTBALL

TF432 Demonstrate the correct stance and way to hold a bat to hit and bunt. Show the proper way to catch and throw a baseball or softball.

TF433 Demonstrate correct pitching techniques for slow or fast pitch softball.

TF434 Teach someone how to catch, throw, and bat.

TF435 Explain the proper care of baseball or softball equipment. Set up a field for play. Do this several times.

TF436 Attend a baseball or softball sporting event.

TF437 Play a baseball or softball game in front of an audience.

BASKETBALL

TF438 Set a goal to improve your average in making baskets. Practice to meet your goal.

TF439 Demonstrate your ability to perform the following skills: dribbling, shooting, passing, and guarding.

TF440 Learn a drill to help you improve a particular ball handling skill. Do your drill regularly until you can perform this skill easily.

TF441 Explain the rules of basketball to someone who is unfamiliar with the sport. Explain different kinds of fouls and the penalties involved.

TF442 Play a basketball game in front of an audience.

FOOTBALL

TF443 Explain the rules of flag football. Play several games observing these rules.

TF444 Learn the names of the offensive and defensive positions.

TF445 Demonstrate your ability to punt, pass, catch, and kick a football. Do these several times.

TF446 Draw diagrams of several football plays. Try them out in a game.

TF447 Talk to a football coach about drills and exercises to build skills needed in football. Practice some of these drills.

TF448 Demonstrate the different signals used by a football referee. Tell what they mean. Explain different kinds of penalties.

TF449 Play a football game in front of an audience.

HOCKEY

TF450 Learn the rules of ice or field hockey and participate in a game.

TF451 Demonstrate your ability to handle the puck forward and backward, pass the puck, and shoot at the goal in ice hockey.

TF452 Wear proper gear for playing hockey such as shin pads, helmet, mouthpiece,

shoulder guards, and ankle guards. Show how to care for your gear properly.

TF453 Demonstrate the correct techniques for the following basic field hockey skills: handling the stick, stopping the ball, dribbling, and driving.

TF454 Learn two methods to dodge or evade a tackling opponent in field hockey and two methods to tackle or take the ball away from an opponent. Use them in a game.

LACROSSE

TF455 Learn the rules of lacrosse and participate in a game.

TF456 What equipment is used in lacrosse? What protective gear is worn?

TF457 Demonstrate your ability to handle the crosse, run with the ball in your crosse, pass the ball, catch the ball, and shoot.

TF458 Learn two methods to dodge or evade an opponent in lacrosse and two

methods to take the ball away from an opponent without fouling. Use them in a game.

SOCCER

TF459 Demonstrate your ability to kick a soccer ball using three basic kicks: instep, inside of the foot, and outside of the foot.

TF460 Describe how indoor soccer is played differently from outdoor soccer.

TF461 Practice heading a soccer ball until you can do it with a fair amount of accuracy.

TF462 Demonstrate several traps or methods of ball controls. Show how you can use different parts of your body to control the ball.

TF463 Demonstrate your ability to dribble and pass a soccer ball. Do drills regularly to improve these skills.

TF464 Teach a soccer skill that you have learned to someone else.

TF465 Explain the rules of soccer to someone who is unfamiliar with them.

TF467 Practice taking corner kicks, penalty shots, and shooting on goal.

TABLE TENNIS

TF468 Demonstrate your ability to perform the following table tennis skills: the block shot, the chop, forehand and backhand drives, and the serve.

TF469 Teach someone how to play table tennis, Play several games with this person.

TF470 Practice hitting the ball back and forth with yourself against a wall. See how many times you can hit it in a row.

VOLLEYBALL

TF471 Demonstrate your ability to serve and volley. Draw a diagram showing correct rotation of the players. Explain how a game is scored.

TF472 Demonstrate your ability to bump and set up the ball. Do drills to improve these skills.

TF473 Explain the rules of volleyball to someone who is unfamiliar with the game.

Tell what are goals in volleyball and what are the penalties or fouls.

TF474 Practice hitting the ball in the air by yourself. Set a goal for how many times in a row you can hit it to keep it up and try to meet it.

TF475 Play in a volleyball game in front of an audience.

CREATE YOUR OWN SPORTS ACTIVITY

TF476 Create your own activity in an individual sport.

TF477 Create your own activity in an individual sport.

TF478 Create your own activity in an individual sport.

TF479 Create a sports activity you can do with others.

TF480 Create a sports activity you can do with others.

TF481 Create a sports activity you can do with others.

SPORTS KNOWLEDGE

TF482 Read a book that tells the history of your favorite sport. Be able to name famous people in this sport.

TF483 Keep statistics on the performance of a favorite sportsperson.

TF484 Read the sports page in the newspaper regularly for one month.

TF485 Collect sports cards. Organize your collection for easy reference.

TF486 Work out averages of a sportsperson for running, hitting, etc. Compare with other sportspersons or teams.

TF487 Organize or participate in a sports trivia contest.

TF488 Serve as a scorekeeper for a game.

TF489 Keep statistics for a game.

TF490 Serve as a referee for a sports game.

TF491 Help coach a team of younger athletes.

TF492 Make charts of field or game areas with player positions. Explain these to some younger children who are learning the game.

TF493 Learn more about a successful sports figure you especially admire. Find out how this person achieved success. Find out facts about his or her life.

TF494 Make a list of sports terms used in your favorite sport. Write down what they mean. Find out how they originated.

TF495 Serve as an announcer for a sports demonstration or game.

TF496 Write up a story on a sporting event you attended.

TF497 Find out how the Olympic Games began. Compare those ancient games with the modern Olympics. Tell about what you learn to group members.

TF498 Learn about the Special Olympics. Volunteer to help with the activities at your local Special Olympics.

TF499 Learn about the professional sports teams in your area and track their season records

TF500 Create an activity to gain more sports knowledge.

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TF502 Create an activity to gain more sports

knowledge.

COMPUTERS AND TECHNOLOGY

TF503 Using the Internet, research information about the world's first computer. Tell your Camp Fire group how big the first computers were and how computers have changed over the years.

TF504 Learn to use a scanner.

TF505 Create a brochure or flyer or advertise an event. Use clip art images in the flyer.

TF506 Create a Web site. You do not have to publish the Web site to complete this activity.

TF507 Make a list of the uses computers have in your daily life. Read your list to an adult or your group.

TF508 Talk to a person who has a computer-related occupation. This might be a systems analyst, a computer programmer, computer engineer, a web site designer, or a person who sells computer hardware or software. Find out what kind of education or training people in such a job must have. Find out what they do on their jobs.

TF509 Learn something from a computer. Participate in an online course or watch an online tutorial.

TF510 Write a story or draw a picture describing how computers might be used in daily life in the future. Share with your group or class at school.

TF511 Learn the flow chart symbols used by computer programmers to plan their programs. Draw a flow chart for doing a common activity in your life, such as doing a math assignment.

TF512 Take a course on how to create a database.

TF513 Find out what computer software is. Compare prices and capabilities for different kinds of computer software that have the same functions. If your family owns a personal computer, look at software for your computer. Or, compare prices of software for a personal computer you'd like to have.

TF514 Review different computer or video game magazines. Choose one you think is most interesting and read several issues of that magazine.

TF515 Compare favorite video games with two of your friends. Do you like the same games? What qualities do you like in a game? Why? Design your ideal game, which combines the best of all games. Share with your group.

TF516 Make a list of five different computer-programming languages and explain when they are used.

TF517 Research Internet safety on the Internet. What is a software firewall? What brand of firewall would you purchase and why?

TF518 Prepare a cost analysis of online services in your area.

TF519 Search the Internet for Camp Fire. What kinds of sites did you find? Share with an adult or your group. Brainstorm ideas for

what Camp Fire could do to increase their online presence.

TF520 Write an e-mail to a relative or friend. Be sure to use spell check.

TF521 Send an e-mail to a friend that contains a link to your favorite Web site.

TF522 Discuss Internet safety issues with an adult family member or a teacher.

TF523 Play a game on the Internet that can help you learn a skill such as spelling.

TF524 Use the computer to make a gift for someone.

TF525 Use a word processing program to complete a school project.

TF526 Use the Internet to research a world issue, such as climate change, access to education, or world hunger. Make a list of people, organizations, or governments that are working to resolve this issue and note how they are doing it.

TF527 Create your own computers and technology activity.

TF528 Create your own computers and technology activity.

TF529 Create your own computers and technology activity.

BUSINESS IN MY FUTURE

TF530 Learn to operate a machine that would be used at a place of business such as a fax machine, scanner, or copying machine. Demonstrate that you can use this machine with a fair amount of accuracy.

TF531 Visit a job placement agency. Find out how a job placement agency helps people find jobs.

TF532 Talk to a person in a business career you are interested in. Find out what kind of training or education is necessary to get a job in that field. Find out where in your area you can get that training or education.

TF533 Read the help wanted section of your local newspaper. Circle jobs you think you would be interested in having. Talk to a person who has a job similar to one you found advertised in the paper. Find out what this person's job is like.

TF534 Talk to a person who interviews job applicants. Find out what this person looks for in potential employees.

TF535 Ask an adult to explain to you what the different deductions on a paycheck are.

TF536 Write a story or draw a picture of yourself in a business job you might have in the future.

TF537 Talk to someone who has a business in the home. Find out why this person likes to work in this way and ask about what their typical day looks like.

TF538 Find out why social security numbers need to be kept private for personal security.

TF539 Find out what services are available for people who are unemployed. What kind of benefits do they get? How do they get help finding work?

TF540 Tour a work place where you can see people working in a variety of jobs such as a

hospital, factory, or office place. Talk to several people in different jobs about what their jobs are like.

TF541 Find out what the laws are in your state on young people working. At what age can young people work in your state? What kinds of jobs can young people hold? Which hours and how many hours can they work?

TF542 Spend a day on the job with a parent or other adult. Observe the kinds of work that are part of this person's job.

TF543 Talk to a person who belongs to a union, such as a teacher. Get this person's opinion on the usefulness of unions. Talk to

someone else who does not belong to a union and get that person's opinion, too.

TF544 Go to a mall or other place where you can visit several businesses. Find out how many businesses are owned or managed by women and by men. How many salespersons are men and how many are women? Does there seem to be a trend? Why or why not? Brainstorm ways we can get more women into business.

TF545 Imagine you are starting your own business. What kind of product or service would you sell? Develop a business plan and make a prototype of your product or create a flyer for your service. Think about things such as the costs of doing business, who your customer is, how you will market your product or service, and what you will charge for your product or service.

BUSINESS IN MY COMMUNITY

TF546 Find out what a nonprofit or not-for-profit agency is. List several nonprofit agencies in your community. Find out where these agencies, such as Camp Fire, get their money.

TF547 Take a behind-the-scenes tour of a place of business people visit frequently. You might tour a grocery store, auto repair shop, or a restaurant. Find out what kind of work goes into the daily operation of this business.

TF548 Choose a product that you and your family often use and trace it back to its original source. Where was the product

purchased? Where did that store get it? Where was it manufactured? What are its raw materials and where did those come from?

TF549 Find out where you would go in your community to get five different things repaired. For example, you might find places that repair televisions, shoes, bicycles, kitchen appliances, the family car, furniture, or torn clothing.

TF550 Talk to three store managers or employees about shoplifting. What is done to prevent shoplifting? What is done when a shoplifter is found?

TF551 Visit an advertising agency. Find out what kind of work goes into planning an advertising campaign.

TF552 What is the Better Business Bureau? Learn about the services offered by the Better Business Bureau in your community.

TF553 Talk to a notary public and find out what kinds of documents must be notarized and why.

TF554 Visit a mass media business such as a newspaper, magazine, or book publisher, or a radio or television station. Find out about the different kinds of jobs people do in this field.

TF555 Talk to someone in a service industry or someone in customer services about customer relations. How do they react to angry or unsatisfied customers? Role play being an unhappy customer with them.

TF556 Visit a retail business. Talk to the owner or manager to find out how merchandise is ordered.

TF557 Find out the different rates charged by the U.S. Postal Service to mail packages. Send two different packages at two different rates.

TF558 Learn the requirements, restrictions, and costs for sending a letter and a package to a foreign country.

TF559 Write for free government pamphlets on businesses and other topics that interest you.

TF560 Find out what kinds of insurance a business must carry.

TF561 Show a new person in your neighborhood where to find useful stores and services such as supermarkets, drugstores, banks, and repair shops.

TF562 Find out where a person would call or visit to get gas and electrical service

hooked up, water turned on, and telephone connected.

TF563 Demonstrate how to use an online telephone directory to find the following; directory assistance; phone numbers for city, county, state, and federal offices, personal phone numbers, and a local business phone number.

TF564 Write an e-mail to a company either to complain or to compliment them on a product.

TF565 Use the yellow pages of the telephone directory to find three businesses offering a product or service you are interested in purchasing. Call the three businesses and ask the price of the item or service.

TF566 Using the Internet, find three businesses offering a product or service you are interested in purchasing. Visit each business's web site and find the price of the item or service.

TF567 Visit a business in your community. Talk to its owner about how the business started and how it has changed over the years.

TF568 Ask a business or professional person how he or she keeps informed on new developments in that field of work.

TF569 Visit your chamber of commerce and learn what it does. Search on the Internet to find the chamber of commerce in another city and request information about that city via e-mail or an information request form.

TF560 Talk to the manager of a large store or shopping area. Ask what is done to make

it a safe place for shoppers. What would be done in case of a fire or other emergency?

TF561 Talk to someone who designs store or window displays. How do they use art and design skills to make product look more attractive.

TF562 Attend a local craft or art fair. Walk around and look at what vendors are

selling. Talk to at least three vendors and ask about their products.

TF563 Create your own business activity.

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TRAIL TO THE FUTURE ACTIVITY RECORD

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