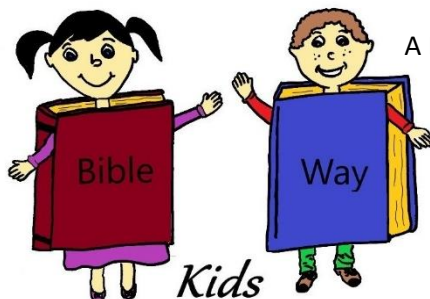




# MaD

# ScieNtist



A Bible Way Kids curriculum compiled by:  
Heritage Family Church  
3840 N. Seneca, Wichita, KS 67204  
316-942-6652

# **MAD SCIENTIST**

## **TABLE OF CONTENTS**

**Lesson One: The Human Body**

**Lesson Two: The Ecosystem**

**Lesson Three: Insects**

**Lesson Four: Fish**

**Lesson Five: Flowers**

**Lesson Six: Trees**

**Lesson Seven: Aging**

**Lesson Eight: Ice, Water, Steam**

**Lesson Nine: Crystallization**

**Lesson Ten: Gravity**

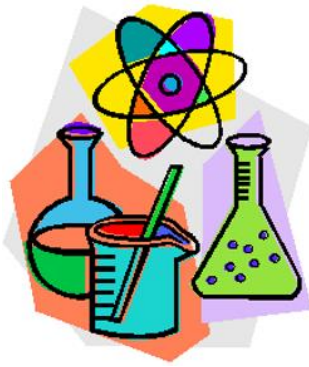
**Lesson Eleven: Science Party**

## **Mad Scientist**

The Mad Scientist Curriculum is a little different from the other series. It is very hands on and a favorite of our Children's Church. The children love the experiments and the action. We are blessed with a young man who loves children and loves acting crazy, a wonderful combination. He is our Mad Scientist, but a female Mad Scientist would work too.

The Mad Scientist series is done in two areas. The first part of the session is done in an area of choice; the second part is done in the laboratory. A simple laboratory can be set up with a small table with fake body parts in water jars, beakers, microscope, etc.... You can decorate it with science posters found at a school supply store. To separate the two areas you can hang streamers from the ceiling. We called this the sanitizer, before entering the lab area the children had to put on their lab coats and safety glasses and take an antibiotic (Mike and Ike candy) and use hand sanitizer. They will enjoy the procedure of getting ready to go into the lab.

Because of the science experiments that are done in the laboratory, to allow for more time, this series will eliminate the craft time and song time. Crafts can be added if you'd like, but we found ourselves running out of time for the experiments and the lessons that they taught the children. We have included the extended time game and activity if you need an additional activity.



## **Mad Scientist**

### **Lesson One: The Human Body**

#### **Lesson at a Glance**

**Welcome:** White men's t-shirts-one per child, safety glasses-one per child,

**Pre-session:** T-shirts and glasses from welcome, puff paint, science posters etc..., clothing rack-optional

**Offering-**Science beaker

**Memory Verse:** Make several small bones and write phrases or words of the memory verse on them, dry erase or chalk board

**Decontamination:** Mike and Ike Candy, hand sanitizer

**Lesson:** Skeleton or a poster of a skeleton

**Mad Scientist:** Regular chicken bone, chicken bone that has been in experiment, vinegar, container for vinegar and bone

(The experiment should be done twice, once several days ahead of time and the other with the children)

**Extended Game or Activity:** Blindfold, several strong tasting food in small containers, several bland foods in containers, plastic spoons

# Mad Scientist

## Lesson One

### The Human Body

**Memory Verse:** Psalm 139:14 I will praise thee; for I am fearfully and wonderfully made: marvelous are thy works; and that my soul knoweth right well.



**Welcome:** Welcome each child today, talk to them about the new series and what they are going to learn about. Give each child a men's white t-shirt to make their own lab coats. Give each of them a pair of safety glasses.



**Pre-session:** Let children make their lab coats out of the white t-shirts. They can use puff paint to write on them. Have science samples available for them to look at. (Let the shirts dry and then cut up the front of the t-shirt to make it a slip on. The children will leave the shirts and put them on each week when they enter the "lab"). (We hung the shirts on a clothing rack so that they didn't have to be folded on top of each other). They will also leave their safety glasses each week.



**Prayer:** Thank God with the children this morning. We are wonderfully made.



**Offering:** Let the children place their offering in a science beaker



**Memory Verse:** Write the memory verse on a dry erase board and go over the verse several times with the children. Using the bones with the memory verse that have been prepared, let the children put their memory verse together. They can

put it in order and then use the bones to make a skeleton to glue on construction paper.

**Decontamination: The children will put on lab coats and glasses and take the antibiotic (Mike and Ike candy) and use hand sanitizer and go through the sanitizer into the laboratory. The laboratory is where the lesson and science experiment will be taught.**



### **Lesson:**

In the next several weeks we are going to be talking a lot about science and things that God has made. He created everything on earth and we want to learn about those things. Today we are going to start by learning about the human body. (Hold up the skeleton). We are going to take a short trip through the human body and talk about some interesting facts.

(As you talk about each part point it out on the skeleton). Read Psalm 139:13-18

Let's look at some of the wonderful things God made in our body. The body is made up of the head, neck, torso, two arms and two legs. The body has 206 bones, 22 internal organs, 600 muscles, 100 trillion cells. Wow! Just imagine, God made each one of you with all of those things. Pretty amazing.

More amazing facts: Every hour 1 billion cells must be replaced.

Average human head has about 100,000 hairs. (Read Matthew 10:30)

The circulatory system-blood system with arteries, veins, etc... is about 60,000 miles long. (Read Leviticus 17:11)

There are 9000 taste buds on the surface of the tongue, throat and roof of the mouth. (Read Psalm 34:8)

The strongest muscle in the body is the tongue. (Read James 3:8)

The human brain weighs about three lbs. (Read Romans 12:2)

These facts about the human body are very interesting, but you can see for each one, God has something to say about it in His Word. I think God cared very much

about each of you when he formed you. That's right, the bible tells us in Jeremiah 1:5, that he knew us before we were formed in our mother's womb. Genesis 1:27 tells us that he created man after his own image. The bible says in Romans 12:1 that we are to present our bodies a living sacrifice unto God.

What are some ways that we can use our bodies to please God? (Give opportunity for several answers). Those were all good answers. Why don't we use our hands and our lips and our minds for him right now? Let's lift up our hands, praise him with our voices, and think about how good God is. Lead the children in a time of worship.



**Mad Scientist Experiment:** Thank you for coming to my laboratory today. Every week we will be learning about Science and the things God has created. Today we are going to make a rubber bone out of a real bone.

Directions:

Bring a chicken bone to class and discuss with the children how hard the bone is. Put the bone into the jar and cover the bone with vinegar. Place a lid on the jar and tell the children you are going to let it sit for three days and the bone will become soft-like a rubber bone.

(Have a bone that you have already completed the experiment on to show them it will really happen.)

What happened: Vinegar is considered a mild acid, but it is strong enough to dissolve away the calcium in the bone. Once the calcium is dissolved all that is left is the soft bone tissue. Now you know why your Mom tells you to drink your milk-the calcium in the milk goes to your bones to make your bones stronger.

**Extended Time Game:** Blindfold the children. Have several strong tasting foods and some that have hardly any taste. Using plastic spoons let the blindfolded children taste each one and tell what they are. The student with the most right answers at the end wins.



## **Mad Scientist**

### **Lesson Two: The Ecosystem, Creation**

#### **Lesson at a Glance**

**Welcome:** T-shirts and safety glasses

**Pre-session:** Books from home or library about creation or eco-systems

**Offering:** Small terrarium

**Memory Verse:** Dry erase or chalk board, memory verse on flash cards-  
draw pictures to illustrate the memory verse on card stock

**Decontamination:** Mike and Ike candies, hand sanitizer

**Lesson:** Blank sheets of paper-one per child, box of crayons-one per  
child,

**Mad Scientist Experiment:** 1-2 liter bottle per child, small aquarium  
pebbles, aquarium charcoal, sphagnum moss, potting soil, small plants,  
(enough of all items for the children in class to make a terrarium)

**Extended Game or Activity:** Pictures that children will draw during the  
Lesson



# Mad Scientist

## Lesson Two: The Ecosystem-Creation

### Scripture Text: Genesis 1

**Memory Verse: Genesis 1:1** In the beginning God created the heavens and the earth.



**Welcome:** Welcome each child with a smile. Give them their t-shirts and safety glasses.



**Pre-session:** Bring books from home or the library about the different aspects of creation or about ecosystems. Children can look at the books and discuss them.



**Prayer:** Let the children thank God today for all that he has created. Ask the Lord to help us today to remember all the good things he had done for us.



**Offering:** Let the children put their offering in a small terrarium if possible.



**Memory Verse:** Write the memory verse on a dry erase board or chalk board. Make picture cards of the memory verse and teach the memory verse using the cards. Flash the cards as the children repeat the verse.

**Decontamination:** The children will put on lab coats and glasses and take the antibiotic (Mike and Ike candy) and use hand sanitizer and go through the sanitizer into the laboratory. The laboratory is where the lesson and science experiment will be taught.



**Lesson:** (At the beginning of the lesson give each child a sheet of paper with instructions to divide the sheet into seven sections. Give them each a box of crayons)

Our story today is going to be from the book of Genesis in the Bible. Since we're talking about science, can anyone tell me what you thing the story will be about? That's right! Creation. Since God created everything, we're going to let you be creative this morning too. As I read from the Bible about what God created, I want each of you to draw a picture in each of the squares about what God made on that day. When we finish the story you should have a complete creation picture.

(Read the creation story in Genesis, pausing at the end of each day and talking to the children about it). Did you know that God had a reason for the order in which He made things? Each thing that he made was dependent upon the things that were made before them. This is called the ecosystem. Each living thing in nature is dependent upon something else to grow. God created the ecosystem. Once more let's go over each day of creation. Look at your pictures as we talk to see if you have everything drawn on the right day. Let's lift our hands and thank God for all the things He has made.

Each of these things are a gift from God to us. We use these things every day. God also gave us another gift when Jesus died on the cross. He gave us the gift of salvation. Who can tell me the plan of salvation? Just like the ecosystem that is dependent on something else to live, we are dependent on the Holy Ghost if we want to live in heaven. (Lead the children in prayer).



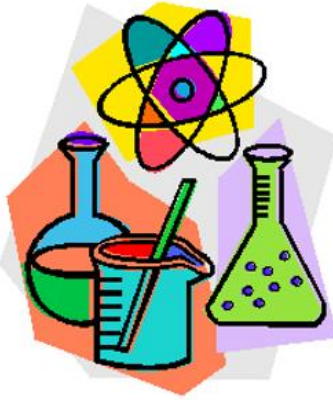
**Mad Scientist Activity: Mad Scientist:** Welcome to each of you today. We are talking about creation today. God made lots of wonderful things when he created the world. We are going to make miniature gardens today. Sound like fun? Let's get started. Creating a pop bottle terrarium is easy. To make a garden in a bottle, wash and dry a 2-liter plastic soda bottle. Draw a line around the bottle about 6 to 8 inches from the bottom, then cut the bottle with a pair of sharp scissors. Set the top of the bottle aside for later.

Place a 1- to 2-inch layer of pebbles in the bottom of the bottle, then sprinkle a small handful of charcoal over the pebbles. Use the type of charcoal you can buy at aquarium shops. Charcoal isn't absolutely required, but it will keep the pop bottle terrarium smelling clean and fresh. Top the charcoal with a thin layer of sphagnum moss, and then add enough potting mix to fill the bottle up to about one inch from the top. Use a good quality potting mix – not garden soil. Your soda bottle terrarium is now ready to plant. When you're finished planting, slide the top of the bottle over the bottom. You may have to squeeze the bottom so the top will fit.

Small houseplants and fern work well in the terrariums.



**Extended Game or Activity: Play Creation Charades** Divide the group into seven teams-they do not have to be even. Give each group a picture of what was created on a specific day. The group will act together to help the other groups guess what day they have.



## **Mad Scientist**

### **Lesson Three: Insects, Ants**

#### **Lesson at a Glance**

**Welcome:** Lab coats, safety glasses, tickets

**Pre-session:** Celery, raisins, cheese spread, Ritz crackers, paper plates, plastic knives

**Offering:** Small basket

**Memory Verse:** Make body parts of an ant with the memory verse written on them

**Decontamination:** Mike and Ike candy, hand sanitizer

**Lesson:** Ant farm

**Mad Scientist:** Ant farm

**Extended Game or Activity:** Stickers (10 per child)

**Drawing:** Container with tickets, ant farm to give away

# Mad Scientist

## Lesson Three: Insects, Ants

### Scripture Text: Proverbs 6:6-8

**Memory Verse: Colossians 3:23** And whatsoever ye do, do it heartily, as to the Lord, and not unto men;



**Welcome:** Welcome each child and give them their lab coats and safety glasses. Let the children write their names on tickets to put in the drawing at the end of the session. There will be a drawing for an ant farm.



**Pre-session:** Make ants on logs using celery, raisins and cheese spread. Have Ritz crackers available for those who do not like celery. Let children place ants (raisins) on their logs. Bring out the ant farm and let the children watch the ants. This will be given away as a drawing at the end of the session.



**Prayer:** Pray with the children asking God to help them learn about Him today. We will be teaching about working diligently for Him. Explain to the children what the word means and pray with them.



**Offering:** Let the children put their offering in a small offering basket.



**Memory Verse:** Make an ant with the memory verse. Write the memory verse in words or phrases on the body parts of the ant. Let the children put the ant together and then practice saying the verse together and individually.

**Decontamination:** The children will put on lab coats and glasses and take the antibiotic (Mike and Ike candy) and use hand sanitizer and go through the sanitizer into the laboratory. The laboratory is where the lesson and science experiment will be taught.



**Lesson:** Our lesson today is about insects. Perhaps one of the smallest insects in creation is the ant, yet God mentions them in His Word. (Read Proverbs 6:6-8) God seems like he is very proud of the ant. This scripture tell us that the ant has no one to tell her what to do, yet she works diligently. (Show the ant farm) In this ant colony or farm each ant has a specific job to do.

Soldier Ants-protect the colony

Scavenger Ants-provide food for the colony

Carpenter Ants- build the colony

Worker ants-work inside the colony

Nursery ants- work in the nursery with the baby ants

Queen ants-lays the eggs in the colony

Every one of them has a job to do and they do it without being told. The success of the ant colony depends not just on one ant, but all of them working together. No wonder God is so proud of the ant. When bad weather comes, the ant is safe in the ant hill because he worked hard and stocked up for winter. God says that we should consider the ant if we are lazy, that what a sluggard is. They always have to be told what to do and when to do it. God wants us to be ready to work without having to be told. Our moms and dads and teachers shouldn't always have to be after us to get our work done. Our Pastors shouldn't always have to preach to us about being lazy in living for God.

We should pray, read our Bible, witness and live for God without someone having to keep telling us. A sign of a mature person is when they can take care of themselves and living for God without being told. Shame on you if you always need to be told to "brush your teeth" or "pick up your clothes" or be reminded to pray. Sometimes we do forget to do these things, but we should always feel bad and be diligent to do them. Let's pray and ask God to help us to be like the ant and do what we are supposed to do without being told.



**Mad Scientist Experiment: Mad Scientist:** We have been learning about the ant today. We are going to look at something very fascinating. We are going to look at an ant farm. At the end of the session today we will be doing a drawing for the farm.

In our lesson today, we talked about all the different jobs the ants do. They have some characteristics that we want to have in our lives. They can teach us to be diligent in all we do.

(Allow the children to look at the ant farm and see if they can identify any of the different types of ants) Let the children go on to the next activity, with small groups coming up at a time for a closer look at the ants.



**Extended Time Game:** Play Mosquito Tag

Give each child a set number of stickers, perhaps ten. Each child tries to tag (bite) someone else. The children place a sticker each time they tag someone (one sticker per tag). The first child without stickers wins the game. Keep playing until all the stickers are gone.



**Drawing:** Place the tickets in a container for the drawing and draw a winner for the ant farm.



## **Mad Scientist**

### **Lesson Four: Fish**

#### **Lesson at a Glance**

**Welcome:** Lab coats, safety glasses

**Pre-session:** Crayons, aluminum foil, cheese grater, washable markers, sheets of blue construction paper

**Offering:** Fish bowl

**Memory Verse:** Cut out fish, two buckets, dry erase or chalk board

**Decontamination:** Mike and Ike candies, hand sanitizer

**Mad Scientist:** Bucket of water, real fish in the bucket of water, plastic fish in bucket, fishing pole with magnet and fish hook

**Extended Game or Activity:** Cupcake for each child, blue frosting, plastic knives, white frosting, small pretzel sticks, goldfish crackers



# Mad Scientist

## Lesson Four: Fish

### Scripture Text: Matthew 4

**Memory Verse:** Matthew 4:19, 20 And he saith unto them, Follow me and I will make you fishers of men. And they straightway left their nets, and followed him.



**Welcome:** Welcome each child with a smile and give them lab coats and safety glasses.



**Prayer:** Thank God today for the opportunity to witness to others about what God has done for us. We want to teach the children to be witnesses and also to be thankful for the truth he has given us to tell others.



**Pre-session:** Let the children draw fish on aluminum foil and color them. Do not cut them out at this time. Using a cheese grater, let the children place the aluminum foil fish over the grater and rub over. Then the children color the fish with washable markers rubbing with their fingers to spread the colors. Cut the fish out and glue them onto blue paper and make waves.



**Offering:** Let the children place their coin offerings in a fish bowl. Have coins available to exchange for any bills they bring.



**Memory Verse:** Write the memory verse in words or phrases on two sets of cut out fish and place them in two bucket that are set at the end of the room. Write the memory verse on the dry erase board or chalk board. Divide the children into two teams. The children will race down to the buckets, pick up a fish and run back. When all the fish have been “caught” the team will work together to put the verse

in order. The first team that finishes wins. Read the verse together several times as a group.

**Decontamination:** The children will put on lab coats and glasses and take the antibiotic (Mike and Ike candy) and use hand sanitizer and go through the sanitizer into the laboratory. The laboratory is where the lesson and science experiment will be taught.



**Lesson:** We have been learning about things that God has made. Today the Mad Scientist is going to help us learn about fish.



**Mad Scientist:** I would love to teach you about fish today. (Give the children some facts about fish and where they live, maybe some of the different kinds of fish that are local). The best way I know to teach you about fish is to catch one and show it to you. I am going to go fishing in this bucket of water and catch a fish for you. (Allow children to watch you bait the hook and lower it into the water. Have a plastic fish in the water that can be caught by the magnet that is also on the hook. Reel up the plastic fish). Wow! Look at that, a fine specimen of a fish. (The children will complain about it not really being a real fish). I guess you're right, maybe I better try again. This time catch the real fish and let the children watch you reel it in.

Hold the fish up and talk about some of the fish's features and how they breathe.

**Teacher:** We better let you go now and get to our Bible story. We are going to learn how to be fishermen for Jesus.

One day Jesus was walking by the Sea of Galilee and saw two brothers, Simon called Peter and Andrew his brother, casting a net into the sea, for they were fishermen. Jesus told them, "Follow me and I will make you fishers of men." The Bible says that they immediately left their nets and followed him. What did Jesus mean when he said they would be fishers of men? (Listen to the answers the children give). It meant that they would be telling others about Jesus. They would be fishing for men's souls. What was the gospel that they would be telling everyone? Repent and be baptized in Jesus name for the remission of sins, and

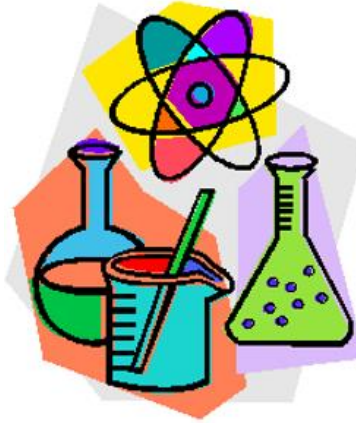
receive the Holy Ghost. That was a much more important job than just being a fisherman. We should all want to be fishers of men and tell others about Jesus. If you haven't already obeyed the plan of salvation, you can do that today. If you already have, you can help someone else experience what you have.

Lead the children in prayer, seeking God. Allow those that have followed the plan of salvation to pray with those that need the Holy Ghost.



**Extended Game Activity:** Let the children make a fishing cupcake. Give each one a cupcake and blue icing and a plastic knife. Let the children spread the frosting on the cupcake. The fishing pole will be a small pretzel rod and the line will be drawn with white frosting. Place a Goldfish cracker at the end of the white frosting line.





## **Mad Scientist**

### **Lesson Five: Flowers**

#### **Lesson at a Glance**

**Welcome:** Lab coats and safety glasses

**Pre-session:** Floral air freshener, pencils

**Offering:** Vase with a few flowers

Memory Verse: Dry erase or chalk board, art materials, construction paper, markers

**Decontamination:** Mike and Ike candy, hand sanitizer

Lesson: Real or fake tiger lily

**Mad Scientist:** White carnations-one per child, cups with water-one per child, food coloring

**Extended Game or Activity:** If possible tiger lily for each child to take home (may be real or fake)

# Mad Scientist

## Lesson Five: Flowers

### Scripture Text: Matthew 6:28

**Memory Verse: Matthew 6:28** And why take ye thought for raiment? Consider the lilies of the field, how they grow; they toil not, neither do they spin:



**Welcome:** Welcome each child with a warm smile and give them their lab coats and safety glasses.



**Pre-session:** (Before the session spray a floral air freshener in the room, especially near the activity table. Make sure that it is fairly strong, as you want the children to notice it) Bring a library book about flowers. Talk about how a flower feels, how it smells and what a flower looks like.



**Prayer:** Lead the children in thanking God for all the beautiful things around us. The beautiful flowers make life much more interesting.



**Offering:** Let the children put their offering into a vase with a few flowers in it.



**Memory Verse:** Write the memory verse on a dry erase or chalk board. Give the children art materials and let them make a vase of flowers and write the memory verse below it. Talk to them about what raiment is and how if God cares for the flowers he created how much more he cares for us. Read the verse several times as a group.

**Decontamination:** The children will put on lab coats and glasses and take the antibiotic (Mike and Ike candy) and use hand sanitizer and go through the

sanitizer into the laboratory. The laboratory is where the lesson and science experiment will be taught.



**Lesson:** (This story needs to be told with much drama). We are going to hear a story today about a little girl named Bonnie. Bonnie had a terrible problem that she didn't know how she would ever solve. Every time she looked in her mirror she saw something on her face that was so horrible that she almost hated to wash her face every morning. Every time she looked it reminded her of that horrible thing, or should she say horrible things!! SHE HAD FRECKLES!!!! Not just one or two, but whole globs of freckles. What could she ever do to get rid of them? She hated going to school or church, or anywhere because someone was surely going to say something about all her freckles.

One day as she was looking at one of her mother's magazines she noticed something that almost made her jump up and down. Right there in front of her eyes was the answer to her prayers. The article said that she could buy a cream that would take away all of her freckles. She could not believe it!! All she had to do was clip out the coupon and send away for the cream. This was the most wonderful day of her life. She immediately got her scissors and mailed away for the cream. Every day she would run home from school to see if her package had come. She wanted to get the mail before anyone else saw it; she didn't want anyone laughing at her. Her mother had always told her she beautiful just the way she was, but she knew better.

At last the glorious day came and she received her special package. Inside was what she had been waiting forever for. The package said that all she had to do was put the cream on and the freckles would instantly disappear. She could hardly wait to use it. But, before she could put it on her face, her mother came in with some wonderful news. Grandma and Grandpa had called and they wanted her to spend the night and go with them to pick strawberries the next day. She loved spending time with her grandparents and really loved picking strawberries. She carefully packed away the freckle cream determined to put it on first thing in the morning. She just knew by evening those horrible freckles would be gone.

The next morning, very early, Bonnie got up and ran and put on her freckle cream.

With great confidence she left the house with her grandparents to pick strawberries. It was a very hot day, but Bonnie enjoyed her day with her grandparents picking the lush, ripe berries.

When Bonnie got home at the end of the day and entered her home, everyone stared at her. “What is wrong with your face, Bonnie?” her mother asked. Bonnie was so thrilled that someone had already noticed that all her freckles were gone! But before she could answer, her mother whisked her up the stairs and stood her in front of the mirror. To Bonnie’s horror she looked at herself and began to cry. Instead of taking away the freckles, her face was red and seemed to be covered in more of the freckles. She ran to her bedroom and grabbed the freckle cream. In small print on the bottle it said to be sure you did not put the cream on and go out in the sun all day. This only caused the opposite effect and caused more freckles! Bonnie lay down on her bed and sobbed. Her mother came to the door and told her it was time for supper, but Bonnie wasn’t hungry and continued crying.

Grandpa came to her room and asked her what was wrong. She told him the whole story from the beginning. He hugged her and explained that God had made her just the way He wanted her. Just like the flowers, she was beautiful in His sight. Bonnie looked at Grandpa and said, “Maybe so, but I’ve never seen a flower with freckles!” With that she turned back on her bed and continued crying.

The next morning, Bonnie opened her swollen eyes and saw something on her pillow. When she rolled over and picked it up, she realized Grandpa had come into her room and put it there. (Show the tiger lily). A beautiful tiger lily was on her pillow, a flower that did indeed have freckles.

Every one of us probably have things about ourselves that we are not happy about. Some things we can change, others like freckles we cannot change. But in all these things we need to remember that God made us and we are very special to Him. Jesus loves each one of you just as you are. He made you in His image and created you just the way he wanted you. Then, he loved you so much that He died on the cross so that you could be saved. Allow the children to pray.



**Mad Scientist Experiment:** This is one of my favorite lessons. I love flowers. I love to give flowers to the people I love. That's what I'm going to do today. I love all you children and I brought flowers for all of you.

(Give a white carnation to each child, along with a cup of water). Help the children to cut the end of their flower with scissors and place it in the water. Put a few drops of food coloring in each cup.

What do you think will happen to the flowers? We will have to leave the flowers here until next week and you will see that something pretty cool has happened to your flower. I can hardly wait until next week!!



**Extended Time Activity:** If time allows play flower basket upset. Use flowers-lily, rose, carnation and daisy. Have children sit in a circle with one less chair than children. One child is in the middle and calls the flowers. Give each child a flower to be. When that flower is called they trade seats with the other children that have flowers with the same name. The child in the middle tries to get a seat. Play until all flowers have been called

If possible give each child a flower to take home today, preferably tiger lilies (real or fake if they can be found).





## **Mad Scientist**

### **Lesson Six: Trees**

#### **Lesson at a Glance**

**Welcome:** Lab coats, safety glasses

**Pre-session:** Carnations from last week

**Offering:** Small tree limbs and leaves

**Memory Verse:** Dry erase or chalk board, cut out apples and leaves for each child, construction paper, sharpies

**Decontamination:** Mike and Ike candy, hand sanitizer

**Lesson:** Fig Newton cookies

**Mad Scientist:** Leaves from three different types of trees, glass containers, labels, rubbing alcohol, plastic spoons, aluminum foil, shallow pan, hot water, scissors, coffee filters, tape

**Extended game or activity:** Potatoes-one per child, toothpicks, containers large enough for potatoes, water

# Mad Scientist

## Lesson Six: Trees-Fig Tree Story

### Scripture Text: Luke 13:6-9

**Memory Verse: Psalm 1:3** And he shall be like a tree planted by the rivers of water, that bringeth forth his fruit in his season...

**(The Mad Scientist experiment today requires time to complete. It would probably be a good idea to do this experiment at the beginning of the session to allow time for the children to see the results or you could do the first part of the experiment ahead of time and explain to the children what you have done)**



**Welcome:** Welcome each child with a warm smile and give them their lab coats and safety glasses.



**Pre-session:** Bring out the carnations that were put in colored water last week. Let the children see the changes in the flowers and talk about what has happened. Relate the changes to the roots of a tree that provide nourishment for the rest of the tree and its branches.



**Prayer:** Encourage the children to use this time to worship God and thank Him for all he has done. Pray that they will learn more about Him today.



**Offering:** Have several small tree limbs and leaves near the offering today. Let the children place their offering among them.



**Memory Verse:** Write the memory verse on a dry erase or chalk board. Have apples cut out and placed in the center of the table, along with some pretty leaves. Let the children choose several of each and draw a tree on their paper. They

can glue the apples and leaves on the trees and then write the memory verse on the apples and leaves, a few words on each one. When finished read the memory verse as a group and then individually.

**Decontamination: The children will put on lab coats and glasses and take the antibiotic (Mike and Ike candy) and use hand sanitizer and go through the sanitizer into the laboratory. The laboratory is where the lesson and science experiment will be taught.**



**Lesson:** (Give each child a fig newton). We are going to talk today about the importance of bringing forth fruit and what it takes to make that happen.

A man had a fig tree in his garden. Figs are what are in the middle of the cookie that you are eating. They are very sweet and grown in very warm climates. For three years the man came to the tree at the time of the year that it should have delicious figs on it. He wanted to pick some figs to eat, and some to take home for his family and friends. But each year the tree didn't have any figs on it!

A man who we are going to call John tended the garden for the man. He took care of all the trees and plants. One day, the owner of the garden said to John, "This tree is just taking up space in my garden it is no good. It has never had any figs on it.

Please take it out and plant something else in its place".

John said, "Sir, please let me try once more to get the tree to grow figs. I will break up the soil around the trunk with my hoe, and put down fertilizer, if that helps, and there are figs next year, won't that be great? But if it still does not grow figs next year, I will cut it down and plant something else..."

Did you know we live in a garden? That's right the earth is God's garden. So, does that give you a hint about who the fig tree might be? Can you guess whose part John was playing in the story? Let's talk about it.

This story is actually in the Bible in Luke 13:6-9. Do you feel like a tree? In the story the tree's owner was expecting figs from the tree. Just as the garden's owner expected fruit from his tree, so God expects fruit from you and me. You might say,

“How can I grow fruit?” Well the bible says that our fruit is telling other people about Jesus and being the kind of Christian that we need to be.

Now, let’s talk about the part of John in the story. Who takes care of us here in God’s garden? Who teaches and preaches to us and helps us to grown fruit to please Jesus? Just like John in our story offered to fertilize the fig tree and loosen the soil around it, so does our Pastor help us. Our pastor gives us good food-messages from the Word or God to help us grown. We should be very careful to listen to our Pastor and obey the Word that he preaches. If we do not listen and obey the word and bear good fruit, someday our Pastor will have to tell the Lord that he tried to help us to be saved, but that we wouldn’t listen. Your Pastor loves every one of you children and he wants you to be saved. Sometimes we might feel like the preaching is hard and is hurting us, but really Pastor is just digging around our tree and putting down more fertilizer to help us grow. Let’s lift up our hand and thank God for our Pastor. Let’s remember to pray for him every day and ask God to help us to grow good fruit.



### **Mad Scientist Experiment: Hidden Leaf Colors**

Good Morning boys and girls, we have been learning about trees today. We are going to do an experiment with leaves. Where do all the beautiful colors of fall leaves come from? They are there in the leaves all along; they are just being masked or covered up by the green chlorophyll each leaf uses to make food during the warm months. As days get shorter and colder, trees shut down the food making leaves for the winter and stop making chlorophyll, which means the green, goes away. Once this happens, the other colors hidden in the leaves begin to show through and the leaves change colors. Let’s see if we can see any hidden colors as we do our experiment. Watch very closely.

**Directions:**

1. Tear, cut or chop the leaves into really small pieces and put them into the glass containers. Label each container with the name of the tree.
2. Add rubbing alcohol to each container, enough to cover the leaves. Use a plastic spoon to grind the leaves into the alcohol.
3. Loosely cover the container with aluminum foil and place them in a shallow pan filled with about one to two inches of hot tap water
4. Keep the containers in the water for about a half hour, until the alcohol has become colored (the darker, the better). During this time gently shake each container every five minutes and replace the water in the pan if it cools.
5. Using scissors, cut a long thin strip of coffee filter for each container and label it with the tree name.
6. Remove the containers from the water and remove covers. Place the coffee filter strips into their respective containers, allowing one end to be immersed in the alcohol. Bend the other end over the top of the container and tape it down.
7. The alcohol will travel up the coffee filter, bringing the leaves colors with it.

After about 30-90 minutes the colors will travel different distances up the paper as the alcohol evaporates. You should be able to see different shades of green and possibly some yellow and orange.



**Extended Game or Activity:** Let each child select a container and a potato to put in the water and later see the roots grow. Use the toothpicks to hold the potato up, but make sure the water is full enough to cover the bottom of the potato. Check the potatoes weekly to see what is happening. (This is an ongoing activity, if you have a window that the potatoes can be placed in, that would help the process, let the children take them home during the last session.)



## **Mad Scientist**

### **Lesson Seven: Aging**

#### **Lesson at a Glance**

**Welcome:** Lab coats, safety glasses

**Pre-session:** Family type magazines, construction paper or poster board, glue

**Offering:** Cane, baby bottle, offering basket

**Memory Verse:** Dry erase or chalk board, card stock with phrases of the memory verse written-6-8

**Decontamination:** Mike and Ike, hand sanitizer

**Lesson:** Baby bonnet, baby bottle, baseball cap and bat, lap top bag, suitcase and hat, cane

**Mad Scientist:** Five carrots, five see thru containers, soil

**Extended time game or activity:** Garbage can or bucket, cotton swabs, masking tape or chalk, straws

# Mad Scientist

## Lesson Seven: Aging

**Memory Verse: Psalm 37:25** I have been young, and now am old; yet have I not seen the righteous forsaken, nor his seed begging bread.



**Welcome:** Welcome each child with a warm smile and give them their lab coats and safety glasses.



**Pre-session:** Give the children various magazines that have pictures of babies, young children, teen agers and adults and elderly. Let them make a collage by tearing or cutting out the pictures and gluing them on. They can work individually, in groups or make a large poster as the whole group.



**Offering:** Have a cane and a baby bottle near the offering container. Talk to the children about the different ones who would use these items.



**Memory Verse:** Write the memory verse on the dry erase board or chalk board. Write words or phrases of the verse on pieces of cardstock and give them out to children to hold facing outwards. Let the rest of the group read the verse several times turning one card backwards each time they read the verse. By the last time the children will be reciting the verse from memory. (In a small group, you can tape the pieces of card stock to the wall and then turn them over to face the wall)

**Decontamination:** The children will put on lab coats and glasses and take the antibiotic (Mike and Ike candy) and use hand sanitizer and go through the sanitizer into the laboratory. The laboratory is where the lesson and science experiment will be taught.



**Lesson:** (Use one of the boys in the class to help with the lesson today.)  
(Have a baby bonnet and bottle, a baseball cap and bat, a laptop bag, a suit coat and hat and a cane).

We are going to talk about something that happens to each and every one of us. No one can escape what we are going to talk about. Can anyone guess what it is? (Ask a boy to help).\_\_\_\_\_ is going to help me tell you what it is.

First this young man was born into the world as a baby. (put the bonnet on boy and give him the bottle), then he became a young man like he is today. (give him baseball cap and bat) As he gets older he will go to high school and college (give him laptop bag), then he will get a wonderful job and raise a family (give him the suit coat and hat), the next stage of his life is when he has to lean on this for support (give him the cane). (The young man can be seated.) Can anyone guess what our lesson is about now? Let the children guess. We are going to talk about growing old or aging. No one can escape growing older, it happens to our bodies every moment. The Bible has a lot to say about aging. (Read Deut. 5:33) We are told that if we follow the instruction of the Lord we will have a long life. Old age may also be a reward of those who honor their parents (Read Exodus 20:12 and Ephesians 6:1)

We should also honor and listen to those who are older, (Deut. 32:7).

Do you ever wonder what it will be like to get old? When you are young you can hardly wait until you are old enough to get your own car or move out on your own. Everything is just waiting for you to get older. Then when you get that age, you can't wait to get married and have children. Then you can't wait for your children to have children and you get to enjoy your grandchildren. Then you can't wait until you retire and can enjoy all the free time that you will have. Then something happens.

You get older and life goes by and everyone faces the end of their life here on earth. Death is something that happens to everyone, sometimes before you get old, but we all know that no one will live forever here in this body. But even when we die, there is something inside us that will live forever. Does anyone know what that



is? Our soul! This is a part of us that God made in each of you that will never die. The Bible tells us that all souls belong to God.

We can decide if we want our souls to go to heaven or hell. We have that choice. We can live our lives for God or we can live our lives for the devil. Jesus gave us that choice when he died on the cross. He shed his blood so that each of you could go to heaven. (Give each child a marble and tell them to put the marble in his/her shoe. For the next few minutes have them walk around the room. The children will complain about the pain, but don't let them remove the marbles. Sit back down and remove the marbles.) How did the marble feel in your shoe? Was it comfortable?

The marbles are going to represent sins in our lives. Bring your marble up here and as you drop your marble in the container, name a sin. (After all the children have brought their marbles, put all the marbles in your shoes and stand up). Jesus can forgive all our sins, because just like I have taken all these marbles (sins) and am bearing the pain that you had, Jesus took all our sins on the cross and bore our pain. He loved us so much that he died to forgive our sins. (Take marbles out of shoes and continue lesson).

Would any of you like to pray right now while you are young and ask Jesus to forgive you and fill you with the Holy Ghost? You don't have to wait until you are old to serve God; the Bible says to remember your creator in the days of your youth. He wants to show you his love. Give altar call and pray with the children.



**Mad Scientist Experiment:** Wow! I really liked the way you were praying. God loves that. We're going to finish up an experiment that I started a few days ago.

I took these carrots, (show them in jars) and put them in soil. The first one I started five days ago and the last one today. Can you see the difference in the carrots from day to day? The one I put in the jar on the first day is starting to look yucky isn't it? That's called decomposition. The fibers in the carrots are starting to break down and age. The carrot I put in today looks new and fresh.

**Directions:**

Need: 5 plastic jars, 5 carrots, soil

Place carrots in jars one per jar-spaced out one day each

Ex: 1<sup>st</sup> carrot-day one, 2<sup>nd</sup> carrot-day two and so on,

Last carrot-day of experiment

We want our lives to be like this new carrot that I put in the jar today. We want our lives to be new every day in Jesus. Even though, like the teacher taught you today, our bodies will grow old, our souls don't have to. How do we keep our souls feeling new and not old? We get full of the Holy Ghost, pray every day, read our Bibles, fast, and listen to the Word of God that Pastor preaches. We want our souls to be fat and healthy, don't we?

**Extended Time Game or Activity: Missing the Mark game**

Lay a garbage can or bucket on its side on top of a chair or the table with the opening facing the children. Take three steps and make a shooting line on the ground using masking tape or chalk.

Object: The children attempt to shoot cotton swabs through a straw into the garbage can while standing behind the line.

Give each child a drinking straw and three cotton swabs. Show them how to shoot the cotton swabs. Insert one cotton swab at a time into one opening of the straw leaving only a small portion of the tip showing. Put the opposite end of the straw in mouth and blow through the straw, trying to shoot the cotton swab into the bucket.

(After everyone has had a chance to play)

Let the children know that the bucket represents God. The cotton swabs are our lives. Just like we didn't hit the bucket every time in the game, sometimes in our lives we fall short of obeying God's word and this is called sin. When we fail God and we sin, we need to always come back to Him and repent and ask Him to forgive us. He will. Don't give up; just keep trying to hit the mark.



## **Mad Scientist**

### **Lesson Eight: Ice, Water, Steam**

#### **Lesson at a Glance**

**Welcome:** Lab coats, safety glasses

**Pre-session:** White paper, crayons, pencils

**Memory Verse:** Make raindrops -cut out enough that each child has 4-5, construction paper, glue

**Decontamination:** Mike and Ike candy, hand sanitizer

**Lesson:** Electric single burner, pan of water, ice cube

**Mad Scientist:** Baby oil, vegetable oil, ice cubes, food coloring, a clear glass

**Extended time game or activity:** Cornstarch, water, food coloring

# Mad Scientist

## Lesson Eight: Ice, Water, Steam

### Scripture Text: Acts 9

**Memory Verse: Psalms 51:10** Create in me a clean heart, O God; and renew a right spirit within me.



**Welcome:** Greet each child with a warm welcome and give them their lab coats and safety glasses



**Pre-session:** Give each child a white sheet of paper and have them draw as many ways that they can that water appears. Water, steam, rain, lakes etc...



**Prayer:** God can truly change our hearts. He can work on a child's heart, just like he does an adult. Pray with the children who need the Holy Ghost today that God can give them a changed heart.



**Offering:** Let the children put their offering into a container of ice today.



**Memory Verse:** Write the memory verse on a dry erase board or a chalk board. Let the children use the raindrops that have been made in advance to write their memory verses on. They can then glue the raindrops on a sheet of construction paper and create a rainy day scene. Read the memory verse together as a group several times. Talk to them about the changes that would happen if it was cold outside and the raindrops were falling. We would experience a change in the raindrops; they would become sleet or hail.

**Decontamination:** The children will put on lab coats and glasses and take the antibiotic (Mike and Ike candy) and use hand sanitizer and go through the sanitizer into the laboratory. The laboratory is where the lesson and science experiment will be taught.



**Lesson:** (use a single burner with a pan of water, and an ice cube)

We are going to talk about things that change today. Let me show you what I'm talking about. Show the pan with the water. This is just plain water, but I'm going to change it into a different form. Turn on the burner and place the pan of water on the burner. When it starts to boil, show the children the steam that is being made.

What is making the steam? That's right; it is the water becoming hot and changing to steam. It is being converted to steam. Now, what if I take this same water and put it in the freezer? What will happen? That's right, it will turn to ice, (show the ice cube) it will be converted from one form to another.

Our lesson today is about a man in the Bible who was converted by the power of the Holy Ghost. He was so converted that his name was changed. Saul was a very intelligent man. He had been trained in the best schools of that time. He was very learned in the scriptures. When he heard that there was a man named Jesus who had followers he was very suspicious. They were saying that this man named Jesus was the Messiah and was sent to save the people from their sins. He could not believe it and he set out to kill everyone who followed Jesus. He even held the coats of those that stoned one of his followers-Stephen. He got letters from officials that allowed him to go into the cities and kill any who believed in Jesus. Everyone was afraid of him.

One day as he was traveling to the city of Damascus he was blinded by a great light from heaven. The voice of God instructed him to go into the city and wait for direction. All the way into the city, Saul had to be led by the men that were with him.

God spoke to a man named Ananias about Saul and told him to go to Saul and preach the gospel to him. Saul was very humble when he heard the truth. He repented and was baptized and we know he received the Holy Ghost, he later writes that he speaks in tongues. Instantly, the scales on his eyes were taken away and Saul, who became Paul, began to preach this same gospel to everyone he met. The New Testament is full of the things he did and the gospels that he wrote. He was changed and converted by the mighty power of God.

You can be changed the same way today. One thing that never changes is the Word of God. You still need to repent, and be baptized in Jesus name and receive the Holy Ghost to be saved, just like Saul did. You may not receive a name change, but you will receive the peace and joy that only God can give.

Give an altar call praying with the children that are hungry.



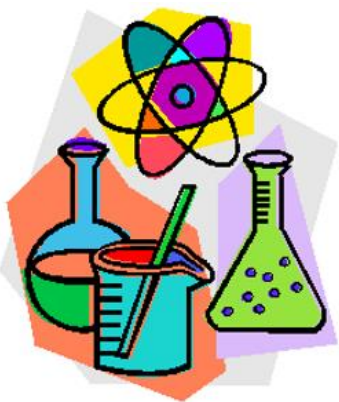
**Mad Scientist Experiment:** Materials: Baby oil, vegetable oil, ice cubes, food coloring, clear empty container (A drinking glass will work)

Directions:

1. Add two drops of food coloring to the clear container.
2. Fill half of the container with vegetable oil and fill the remainder with baby oil (leave just a little space)
3. Notice with the children how the two oils mix together. The vegetable oil settles below the baby oil
4. Gently drop an ice cube into the container. It will sit right in the middle of the container, not sinking or floating to the top.
5. Now wait patiently. After a little while, you'll see a single drop begin to melt away from the ice cube. It will look like it is frozen in time as it clings to the ice cube until the very end.
6. Unlike the ice cube the drop of water eventually sinks straight to the bottom of the glass. As the ice cube melts, drop after drop of water head to the bottom of the container, mixing with the food coloring.



**Extended Game or Activity:** Spread out newspaper or plastic table cloths on the tables. Make goop by mixing cornstarch with water. The children use their hand to mix it and it appears to be hard. When they pick it up it oozes through their fingers. Let them observe the different changes in the goop.



## **Mad Scientist**

### **Lesson Nine: Crystallization**

#### **Lesson at a Glance**

**Welcome:** Lab coats, safety glasses

**Pre-session:** Make rock candy (resources)

**Memory Verse:** Dry erase or chalk board, small soft ball or bean bag

**Mad Scientist:** Measuring spoon, liquid bluing, laundry detergent, small bottle or ammonia, small jar, plastic spoon, disposable pie tin, food coloring, 8-10 charcoal briquettes

**Extended game or activity:** Purchased rock candy-one per child to take home

# Mad Scientist

## Lesson Nine: Crystallization

### Scripture Text: Genesis 2-3

**Memory Verse: Romans 5:8** But God commendeth his love toward us, in that, while we were yet sinners, Christ died for us.



**Welcome:** Welcome each child with a warm smile and give the children their lab coats and safety glasses.



**Pre-session:** The children will be making rock candy. This will be a longer than usual pre-session. All teachers will need to be on hand and helping the children. Explain to the children the concept of crystals.

**Offering:** Let the children place their offering in the offering basket.



**Memory Verse:** Write the memory verse on the dry erase board or chalk board. Sit the children in a circle and start a small soft ball or bean bag around the circle. Play music and children pass the ball or bean bag around until the music stops. When the music stops the child holding the ball or bean bag must read or recite the memory verse. If time allows play the game until all the children have had a turn.

**Decontamination:** The children will put on lab coats and glasses and take the antibiotic (Mike and Ike candy) and use hand sanitizer and go through the sanitizer into the laboratory. The laboratory is where the lesson and science experiment will be taught.



**Lesson:** In our story today Adam and Eve lived in a beautiful garden that God had made. It was called Eden. God intended for them to be able to live in that beautiful place forever. But Satan (the devil) had another plan. There was a tree in



the garden that God had told Adam and Eve that they could not eat of. In the day that they ate of that tree, they would surely die. They were very careful to obey God and not eat of that tree. They wanted to please God and they loved the garden that God had given them.

One day a serpent came to Eve and told her that she could eat of the tree that God had forbidden. He made her think that God was trying to keep something good from her. He lied to her. She ate of the tree and then got Adam to eat the fruit also. Do you think that fruit tasted very good to them after they ate it and realized their sin? I don't think so either.

When God came to talk to them in the cool of the day, they hid from him. Their sin caused them to hide from the God they loved. When God talked to them he asked them what they had done. He already knew, he wanted them to admit their sin. Eve blamed the serpent, Adam blamed Eve and the serpent was left holding the bag, he had no one else to blame. But God doesn't care if we have anyone to blame, he holds each of us accountable for what we do. He gave a punishment to each one. Sin causes terrible things in our lives. Adam and Eve were sent away from the beautiful garden and death came into the world. The serpent had to go on his belly and be hated. Anyone like snakes!?!? Most of us don't.

This all sounds like a very dark and ugly situation. Satan must have thought he was the winner. But God looked all the way down through time and made a plan to take away all the horrible sins of man.

What did he do? (Listen to the children's answers) Yes, God has a crystal clear plan. One that would take away the ugliness and dirtiness of sin and make a life beautiful. The cross was the answer that God had for sin. When Jesus died on the cross, his blood was shed for all the sins of man. He died to wash and make clean all of us who had sinned. He paid the price. What do we need to do to take advantage of what he did? We need to repent-ask God to forgive us of all the wrong things we have done, be baptized in Jesus Name and receive the gift of the Holy Ghost.

We can have a beautiful life that is crystal clean. We don't want those dirty sins to hang on us and make us ugly. Let's all pray and ask Jesus to give us clean hearts and wash away our sins with his blood. Pray with the children as they seek God.



## **Mad Scientist Experiment:** Dirty Coal into Beautiful Crystals

**Materials Needed:** Measuring spoon, liquid bluing, laundry detergent, table salt, small bottle ammonia, small jar, plastic spoon, disposable pie tin, food coloring, Eight to ten charcoal briquettes

**Directions:**

1. Measure two tablespoons each of bluing, laundry detergent, salt and ammonia into a small jar. Avoid breathing the fumes as much as possible. Stir with the plastic spoon
2. Place 3-4 charcoal briquettes on a disposable pie tin. Add a few drops of food coloring on each briquette.
3. Pour some of the solution in the jar over the top of the charcoal pieces. The crystals will begin forming.

**Mad Scientist:** This coal was very black and ugly wasn't it? But we added a solution that made crystals out of the ugliness. That's like in our story today. The blood of Jesus was the solution for the ugliness of sin. Let's lift up our hands and thank Jesus for his blood.



**Extended time game or activity:** Give each child a piece of purchased rock candy to take home or eat now. Place the ones they have made today in a place that they will grow, preferably out of direct sunlight. The children can check on them and take them home next week.



## **Mad Scientist**

### **Lesson Ten: Gravity**

#### **Lesson at a Glance**

**Welcome:** Lab coats, safety glasses

**Pre-session:** 8x10 gold or yellow construction paper cut into ticket shapes-one per child, sharpies, poster board with plan of salvation written out

**Offering:** Offering container

**Memory Verse:** Dry erase or chalk board

**Mad Scientist:** Shoe box, magnet, thread or string, paper clip, tape scissors

**Extended game or activity:** See through jar with lid, water, vegetable oil

# Mad Scientist

## Lesson Ten: Gravity

**Memory Verse: I Thessalonians 4:17** Then we which are alive and remain shall be caught up together with them in the clouds, to meet the Lord in the air: and so shall we ever be with the Lord.



**Welcome:** Welcome each child with a warm smile. Give them their lab coats and safety glasses.



**Pre-session:** Make Heaven Tickets: Give each child an 8x10 piece of gold or yellow construction paper that is shaped like a ticket. Let them write Ticket to Heaven on one end of the ticket. On one side of the ticket they will write their name. On the other side they will write the plan of salvation. (The plan of salvation could be written on a poster board for those who don't know it or those that need help with spelling).



**Prayer:** Pray for the service today and tell the children we are going to learn about gravity and the story will be about a gravity defying feat.



**Offering:** Let the children put their offering in the offering container.



**Memory Verse:** Play a game of hangman with the memory verse. You could have teams-boys against girls or play as a group giving everyone a chance to choose letters. Play until the memory verse is figured out. It might take a while but the children really enjoy this game and seem to learn from it.

**Decontamination:** The children will put on lab coats and glasses and take the antibiotic (Mike and Ike candy) and use hand sanitizer and go through the sanitizer into the laboratory. The laboratory is where the lesson and science experiment will be taught.



**Lesson:** We are going to learn about something called gravity. Have any of you heard of that before? Does anyone know what that is? (Wait for their answers).

The definition of gravity is: The force of the earth that pulls objects towards it and prevents them from floating off into space.

So gravity keeps us from floating off into space and keeps our feet grounded on earth. Remember we had an earlier lesson on the importance of our soul. The soul is the part of us that will live forever when we die. There is another force that tries to keep us from living from God. If we give in to that force we will never feel the other force that will take us to heaven someday. That force is sin. Sin tries to work in every one of our hearts and keep us from God. It is like gravity. When we get sin in our hearts we become very heavy and we cannot praise God or live a peaceful life. The force of sin weighs us down with the love of the world and we only want to please ourselves and satisfy the desires of this life.

The other force we want to talk about is the opposite of sin. The Mad Scientist is going to show you an experiment that shows we can defy gravity.



**Mad Scientist Experiment:** Thank you. Yes, I am going to show you an experiment that will amaze you today. We can defy gravity. That means it will look like we are going against the principle of gravity. Let me show you.

**Materials:** Shoe box, magnet, thread or string, paper clip, adhesive tape, scissors.

**Directions:**

Begin by securing the magnet to the inside of the shoe box using the adhesive tape.

Stand the shoe box up, so that the magnet is not at the top

Next, tie the thread or string to the paper clip. The length of the thread that you need will depend on the size of your shoebox.

Start by holding one end of the thread at the base of the shoe box. Slowly move the paper clip up to the magnet and when it reaches the point where the paper clip will stay in midair by itself, secure the thread to the bottom of the shoe box. Since the

magnet is hidden inside the top of the shoe box, it really looks like the paper clip is defying gravity.

**Teacher:** Thank you Mad Scientist. That was amazing! We were able to defy gravity, so we should be able to defy sin. We can do this by having the Holy Ghost in our lives. This is the other force that we are talking about today. This force will also give us the power to go to heaven. Someday Jesus is coming back to take his people to heaven. When he blows the trumpet, the Holy Ghost will be what raises us up to be with Him. The Holy Ghost will defy gravity.

Give an altar explaining the plan of salvation and pray with the children.



**Extended Game and Activity:** Object Lesson: Sin and Holy Ghost do not mix

Do you think liquids always mix? Let's find out.

Fill a jar halfway with water. Put in two drops of food coloring. Ask kids to guess what will happen when oil is added. Add the oil and screw on the lid tightly. Shake the jar, turn it upside down and observe how the oil and water react. The children can see how the two liquids don't mix.

This is the same way that the Holy Ghost and sin cannot live together. The Holy Ghost always helps us to do right and sin always takes us in the wrong direction. They are completely different and repel each other.

We should always keep our lives clean and full of the Holy Ghost and resist sin.

# **Mad Scientist**

## **Lesson Eleven: Party**

### **Lesson at a Glance**

**Welcome:** Give each child their lab coats and safety glasses, letting them know they can take them home today.

The time today will be spent reviewing any stories or experiments that the teachers choose. There should be an extra special snack time today. Perhaps serving the food in science type serving dishes, and special table cloths on the tables. Cupcakes could have science designs, etc...

The Mad Scientist will do one last experiment today. This is better done outside, it can get messy. This is one that our children love. You can relate it to any of the other stories you'd like.

**Mad Scientist:** A roll of Mentos chewy mints (mint flavor), 2 liter bottle of diet coke, sheet of paper to use as a funnel

Play any favorite games of the series if time allows.

## **Mad Scientist Experiment for Party.**

This activity is probably best done outside in the middle of a field or on a huge lawn. Make sure the children are at a safe distance from the bottle.

1. Carefully open the bottle of diet soda.
2. Position the bottle on the ground so that it will not tip over.
3. Start with seven Mentos. The goal is to drip all seven Mentos into the bottle of soda at the same time (which is trickier than you might think). Roll a piece of paper into a tube just big enough to hold the loose Mentos. Load the seven Mentos into the tube, cover the bottom of the tube with your finger and position the tube directly over the mouth of the bottle. When you pull your finger out of the way, all seven Mentos should fall into the bottle at the same time.
4. Don't forget to move away. It should be a large eruption.

(If you choose you can do this experiment more than once, adding more Mentos each time. Are the eruptions higher with more Mentos?)

\*You can relate this experiment to the Holy Ghost and the rapture. If you are full of the Holy Ghost, when you hear the trumpet, you will fly through the air to meet Jesus.\*



# Resources

# Rock Candy

## Ingredients

- 6 cups cold water
- 6 cups white sugar

## Directions

1. Prepare your candy growing area by thoroughly cleaning and drying a 2 quart jar. You will need a place for it to rest undisturbed for about 2 weeks.

2In a large bowl, place the water. Dissolve sugar in water, a little at a time, stirring each time until sugar is completely dissolved, until no more sugar can be incorporated. Pour sugar water into clean jar and place a bamboo skewer in the jar, being sure the top sticks out over the surface of the water. Cover with a cloth, to keep out dust, and let rest until all water is evaporated and crystals have formed on the skewer, several days.