

CONNECT **1**23

Your Family • Community • World

THIS ISSUE

Week 1: Iditarod

Week 2: Women's
history month

Week 3: March hare
Wind power

Mush!

2016 IDITAROD



Aliy Zirkle, of Two Rivers, Alaska, drives her dogs during the ceremonial start of the 2012 Iditarod Trail Sled Dog Race.

BOB HALLINEN, ASSOCIATED PRESS

This month, about 1,000 dogs will compete in the Iditarod, the world's longest sled dog race. More than 80 teams will cover 1,150 miles of rough, often icy terrain from Anchorage to Nome, Alaska. Along the way, the teams are likely to encounter whiteout conditions with gale-force winds and temperatures as low as minus-40 degrees.

HISTORIC ORIGINS

The Iditarod Trail Sled Dog Race is run on a trail that was originally a

mail-supply route. In 1925, part of the trail became a lifesaving highway for the children who lived in Nome.

A feared epidemic of diphtheria caught the town of Nome without enough serum to inoculate the community. A wire for help went out, but plans to send an airplane from Fairbanks were thwarted by weather. It was decided to use a relay of dog teams from Nenana on the Alaska Railroad, down the Yukon River Trail to the Iditarod Trail, and into Nome. Twenty mushers carried the serum the 674 miles in 127½ hours. The

mushers became heroes. President Calvin Coolidge sent medals, and Balto, the dog leading the last team into Nome, was used as a model for statues of dogs in places as distant as New York City's Central park.

The Iditarod race is a commemoration of that historic event.

Mushers have been running the race annually since 1973. Thirty-five mushers attempted the first race, but only 22 finished. The first Iditarod winner took 20 days to complete the race.

Over the years, mushers and their

SEE **IDITAROD** PAGE 2



WIKIPEIDIA

Celebrated sled dog Balto with his musher, Norwegian immigrant Gunnar Kaasen.



Make the most of your shopping style

What's your shopping style?

Prestige shopper

If the most important part of shopping is acquiring name-brand items, you are a prestige shopper. Save money by asking yourself whether the item is truly worth the extra money or are you paying extra just for a name brand.

Impulse shopper

If you buy things based on your moods, you are an impulse shopper. Walk away from items that you did not intend to buy when you entered the store. Think about whether you really need these products. If the answer is yes, and you have the money, return to the store and make the purchase.

Bargain hunter

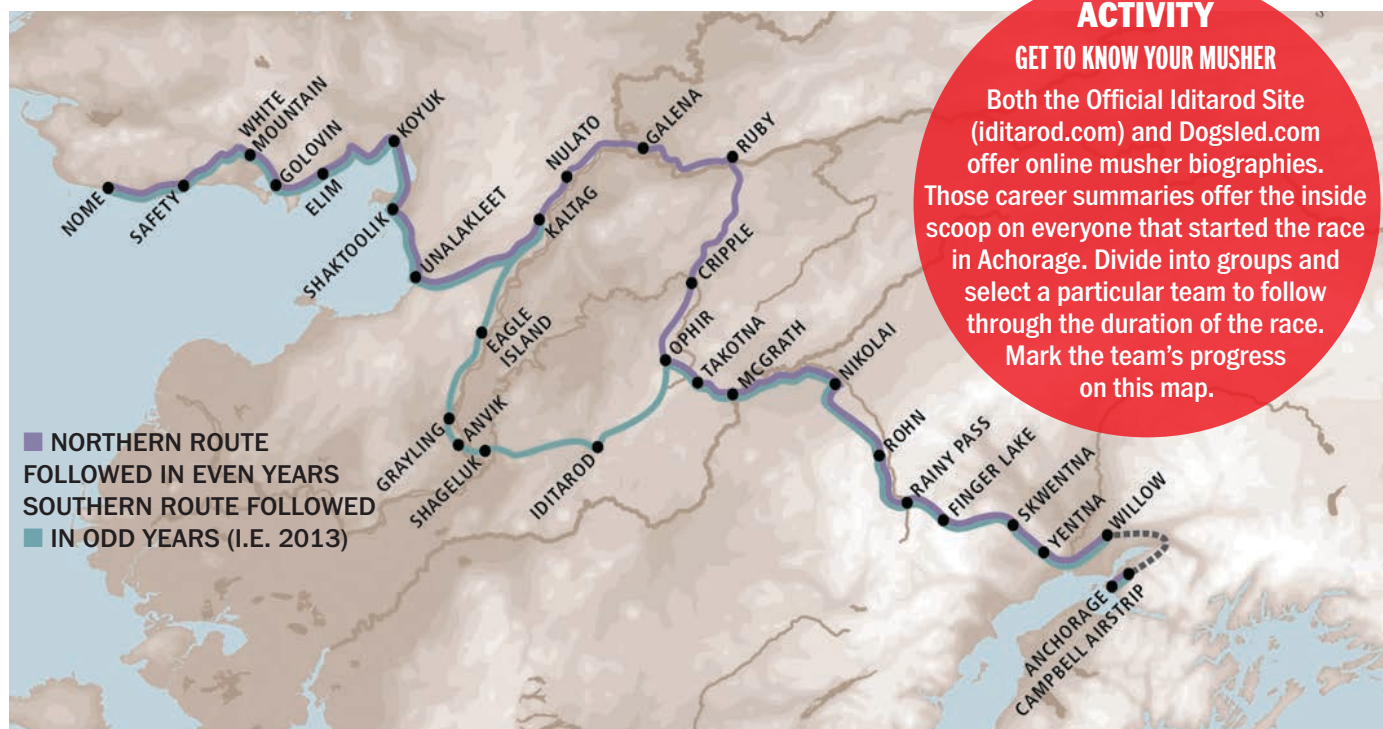
If you love a sale and search for the best deals on everything, you are a bargain hunter. This is a healthy shopping style, but don't get trapped into buying things you don't need just because the price is good.

The key is balance

You can shape your shopping style to develop a healthy relationship with your money. The healthiest shopping style is one that allows you to save for the future and enjoy your money today.

Make a list of your short-, medium- and long-term goals. Figure out how much money you need for each of these goals and make a plan to set money aside regularly.

It's OK to splurge on an unplanned item now and then. Just be sure you aren't sacrificing the medium- and long-term goals that mean so much to you.



Sled dogs

Alaskan huskies are the breed of dog used by most mushers in the Iditarod. They are very hardy, driven, and good athletes.

Sled dogs are bred for their speed and endurance. Training starts when dogs are a couple months old and begins with getting them used to a harness and collar. As they get older, they learn verbal commands and start to pull light loads. Most sled dogs competing in the Iditarod are between 2 and 10 years old. They train year-round, with the most intense training starting in the fall before the March running of the Iditarod. Distance

runs ramp up as the race nears, and by the start of the Iditarod, most dogs will have covered around 2,000 or 3,000 miles.

Sled dogs need to eat around 10,000 calories per day during the Iditarod race. The race rules say that "an adequate amount of food is required to be shipped" to specific race checkpoints. Volunteer veterinarians along the race route perform exams and check log books for each dog kept by the mushers.

In the Iditarod, dogs run for hours at a time over snow, over ice and through water. They are well-equipped to live in cold climates, with thick coats, wide, flat feet and tails that cover their noses for warmth when they sleep. Still, they are exposed to a range of hazards, from dog fights and tangled lines to getting lost and moose attacks.

When a sled dog is about 10 years old, or has injuries or other circumstances that prevent it from racing, it is retired. Some mushers keep retired sled dogs as pets, some sell or give them to other people, and some are scooped up by rescue groups to be cared for and/or placed in a new home. Life expectancy for sled dogs is around 12 to 15 years.

CHECKPOINTS	DISTANCE
Anchorage to Campbell Airstrip	11
Willow to Yentna Station	42
Yentna Station to Skwentna	30
Skwentna to Finger Lake	40
Finger Lake to Rainy Pass	30
Rainy Pass to Rohn	35
Rohn to Nikolai	75
Nikolai to McGrath	48
McGrath to Takotna	18
Takotna to Ophir	23
Ophir to Cripple	73
Cripple to Ruby	70
Ruby to Galena	50
Galena to Nulato	37
Nulato to Kaltag	47
Kaltag to Unalakleet	85
Unalakleet to Shaktoolik	40
Shaktoolik to Koyuk	50
Koyuk to Elim	48
Elim to Golovin	28
Golovin to White Mountain	18
White Mountain to Safety	55
Safety to Nome	22

IDITAROD FROM PAGE 1

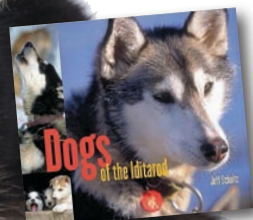
dogs have gained confidence and speed. Last year, the winner completed the race in nine days, 11 hours, 11 minutes and 36 seconds.

The Iditarod is sometimes called "The Last Great Race on Earth." Each team of 12 to 16 covers the distance to Nome in approximately nine to 17 days.

SOURCES: itteacheronthetrail.files.wordpress.com, teacher.scholastic.com

SOURCE: animalplanet.com

"DOGS OF THE IDITAROD," by Jeff Schultz



Blind musher took on the Iditarod in 2006

■ BY KAREN FANNING

Jagged mountain ranges. Frozen rivers. Bone-numbing temperatures. For any musher, the Iditarod is a grueling race. But Rachael Scdoris is no ordinary musher. She is blind.

"I have a shortage of rods and cones in my eyes," explains Scdoris. Rachael was born with a vision disorder called congenital achromatopsia. "I have a lot of difficulty with fine detail and focusing on things. It's not blurry. There's not a lot of depth. Everything is pretty much flat."

Despite her disability, even as a child, Rachael was determined to run "and finish" the Iditarod. On March 18, 2006, she made good on her promise. After 12 days, 10 hours and 42 minutes on the trail, Rachael crossed the finish line in Nome, Alaska, becoming the first legally blind athlete to complete the Iditarod.

"Finishing the Iditarod was my lifelong dream," she told reporters after conquering the Alaskan wilderness.

Rachael didn't just complete the race—she competed. Of the 71 mushers who made it to Nome, Rachael finished 57th.

TRY, TRY AGAIN

Rachael began mushing when she was no taller than the dogs. But it took eight years of begging before her father allowed her to go on a run by herself. Rachael ran her first race at age 11 and has been an active musher ever since.

Like all mushers, Rachael spent a lifetime dreaming of running the Iditarod. In June of 2003, the day after she graduated from high school, she called the Iditarod Trail Committee to ask permission to run the race with the help of two visual interpreters. Her request was denied.

"My wish list was to have two people on snow machines to tell me where to go," says Rachael.

To follow the trail, mushers must look for markers along the way. Rachael would need someone to spot those markers for her.

"The mentality of the Iditarod is roughing it in the woods all alone, just you and the dogs, no help of any kind," she says. "They thought I was asking for some-



ASSOCIATED PRESS

Above, Rachael Scdoris drives her dog team down 4th Avenue in Anchorage, Alaska, during the ceremonial start of the 2008 Iditarod Trail Sled Dog Race. Scdoris competed in the 2005, 2006, 2008, and 2009 Iditarods.



ROBERT AGLI

Right, Rachael Scdoris hugs one of her sled dogs during a break in training.

one to come in and do everything for me, but I was just asking for someone to tell me where to go."

Rachael wouldn't take no for an answer. Three months later, she flew to Alaska and met with the committee in person for six hours. She told them that she still needed assistance, but she didn't want automatic entrance — she wanted to qualify. And that's what she did.

Rachael ran two qualifying races in the winter of 2004. She was required to run at least 500 miles to qualify. Instead, she ran 700 miles.

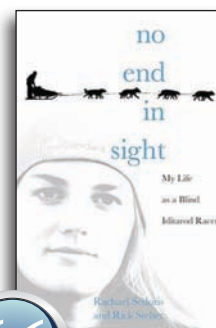
A HISTORIC RUN

On March 5, 2005, Rachael lined up with dozens of the world's top mushers at the Iditarod starting line in Anchorage, ready to take on "The Last Great Race on Earth."

Her visual interpreter, Paul Ellering, was at her side. But after traveling more than 700 miles, she was forced to drop out of the race when her dog team became ill with a virus. Rachael vowed to return in 2006. She did, and the rest is history.

As the first blind musher to run the Iditarod, Rachael received a lot of attention. She says she would rather not be thought of as "the blind musher." Instead, she would like to be known as a "good musher with fast dogs." Rachael refuses to waste a minute of her time feeling sorry for herself.

"Everybody has some sort of problem," she says. "Some are more obvious than others, like mine. We have a choice. We can either sit back and say, 'I'm blind, I'm deaf, I'm in a wheelchair, I have a short attention span' and feel sorry for ourselves and say, 'Poor me.' Or we can just decide, this is what we are going to do, and if we have to work a little harder to get it done, so be it."



"We have a choice. We can either sit back and say, 'I'm blind, I'm deaf, I'm in a wheelchair, I have a short attention span' and feel sorry for ourselves and say, 'Poor me.' Or we can just decide, this is what we are going to do, and if we have to work a little harder to get it done, so be it."

—Rachael Scdoris

DID YOU KNOW

Each year, a group of lucky race fans get to have a very important and special 'seat' at the ceremonial start of the race? Who are the lucky race fans? They are the winners of the IditaRider Auction! The winners of the auction are called: IditaRiders.

— IDITAROD.COM

Word search

1. RACE TIMES HAVE GOTTEN FASTER.

The first Iditarod 1973 took about 20 days to complete; currently, it takes about 10 days. The winner this year set a new record at eight days, 14 hours, 19 minutes. The last place time was 32 days in the beginning, and now it's about 13 days.

2. THE DOGS WEAR BOOTIES.

The ice, snow, and rocky terrain is hard on their foot pads so they have to be protected. Musherers are required by the rules of the race to have at least eight extra per dog on the sled.

3. THERE'S A JAMAICAN DOG SLED TEAM.

Inspired by the Olympic Jamaican bobsled team, a Caribbean tour operator started a Jamaican dog sled team to compete in various races. (It was sponsored by musician, Jimmy Buffett.)

4. DOGS CAN BE SAVED WITH MOUTH TO SNOUT RESUSCITATION.

In 2012 one musher saved one of his dogs who had collapsed on trail by performing mouth to snout resuscitation on him.

5. THE FINISH LINE IS A GOOD PLACE TO BECOME A CITIZEN.

Martin Buser moved to Alaska from his native Switzerland in 1979. He ran his first Iditarod in 1980 and had one of the fastest finish times with his 2002 win. Right after that win, he became a U.S. citizen in a naturalization ceremony held under the monument arch that marks the finish line.

6. SLED DOGS HAVE TO STUDY THEIR VOCABULARY.

Part of sled dog training involves teaching them a set of standard commands.

Hike! (Let's go! Get moving!)
Haw! (Turn left!)
Gee! (Turn right)
On by! (Pass another team! or Pay that distraction no mind!)
Easy! (Slow down!)
Whoa! (Stop!)

7. THE LAST PLACE FINISHER GETS A SPECIAL PRIZE.

It's a race tradition to light a lantern at the finish line in Nome when the race begins and leave it lit as long as there are still mushers out there on the trail. It's a nod to the old custom of the "widow's lamp" which was a safety measure to keep track of when sled drivers were out on the trail and whether they had reached their destination or not. Some sled races started handing out lanterns to the last place finisher as a joke, but now the "red lantern" is an official prize to bear proudly.

— theweek.com

ANCHORAGE	MILES	SLED
BALTO	MUSHER	SNOW
CHECKPOINT	NOME	TEAMS
DOGS	PARKA	VETERINARIAN
ENDURANCE	RACE	VOLUNTEER
HUSKY	RED LANTERN	WIND
IDITAROD	ROUTE	
MARCH	SCDORIS	

E	N	O	H	S	W	R	I	K	B	S	P
G	Y	R	G	C	K	Q	O	J	A	G	D
A	I	O	E	U	R	Y	P	U	L	A	J
R	D	D	U	T	K	A	M	P	T	Z	V
O	G	Q	I	J	N	U	M	S	O	E	M
H	Q	D	C	T	S	A	E	P	T	G	E
C	Y	L	N	H	A	L	L	E	T	C	W
N	L	T	E	I	I	R	R	D	N	Y	O
A	Q	R	T	M	W	I	O	A	E	E	N
Y	K	S	U	H	N	C	R	D	A	R	S
D	E	L	S	A	K	U	D	E	K	Q	C
H	E	H	R	X	D	X	G	I	R	G	D
T	I	I	M	N	R	A	C	E	A	W	O
V	A	T	E	A	M	S	U	S	P	U	R
N	M	N	F	N	E	Y	N	I	U	M	I
T	N	I	O	P	K	C	E	H	C	G	S
Q	T	M	V	O	L	U	N	T	E	E	R
D	E	R	F	R	W	M	G	S	O	F	W
I	M	H	G	W	F	M	W	Q	H	J	D
F	P	P	G	W	V	M	E	L	B	A	D

ANSWERS: (COLUMN, ROW, DIRECTION)

ANCHORAGE(10,14,N)	PARKA(10,14,N)
BALTO(10,1,S)	BALTO(10,16,W)
CHECKPOINT(11,10,NW)	RED LANTERN(11,10,NW)
ROUTE(7,1,SE)	ROUTE(7,1,SE)
SCDORIS(12,10,S)	SCDORIS(12,10,S)
SLED(4,11,W)	SLED(4,11,W)
SNOW(12,10,N)	SNOW(12,10,N)
TEAMS(3,14,E)	TEAMS(3,14,E)
VETERINARIAN(12,4,SW)	VETERINARIAN(12,4,SW)
VOLUNTEER(4,17,E)	VOLUNTEER(4,17,E)
WIND(6,9,NW)	WIND(6,9,NW)



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Read Across America

This month we are celebrating Read Across America!

NEA's Read Across America is an annual reading motivation and awareness program that calls for every child in every community to celebrate reading on March 2, the birthday of beloved children's author Dr. Seuss and throughout the entire Month of March.

In cities and towns across the nation, teachers, teenagers, librarians, politicians, actors, athletes, parents, grandparents, and others bring reading excitement to children of all ages.

Read Today is celebrating by providing every elementary student in Utah with a FREE bookmark (delivered to your school in March) that highlights our new Summer Reading Program and provides you with a FREE McDonald's coupon. For more information, visit, readtoday.com



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Women's History Month

WOMEN INSPIRING INNOVATION THROUGH IMAGINATION



LIBRARY OF CONGRESS

Women's History Month honors and celebrates the struggles and achievements of American women throughout the history of the United States. American women have struggled throughout our history to gain rights not simply for themselves but for many other underrepresented and disenfranchised groups in America.

Women's History Month had its origins in 1981 when Congress authorized and request-

ed the president to proclaim the week beginning March 7, 1982, as "Women's History Week." As requested by Congress, President Ronald Reagan issued a presidential proclamation proclaiming that week as the first "Women's History Week" and recognizing the vital role of women in American history:

American women of every race, creed and ethnic background helped found and build our Nation in countless recorded and unrecorded ways ... As

leaders in public affairs, American women not only worked to secure their own rights of suffrage and equal opportunity but also were principal advocates in the abolitionist, temperance, mental health reform, industrial labor and social reform movements, as well as the modern civil rights movement.

In 1987, after being petitioned by the National Women's History Project, Congress designated the month of March 1987 as "Women's History Month."

Hedy Lamarr is best known as a stunning starlet of early American cinema. But she was more than just a pretty face. Hedy came up with a concept decades ahead of its time.

Originally from Vienna, Austria, Hedy Lamarr was brought to the U.S. by MGM studio head Louis B. Mayer. Even though she was one of Hollywood's biggest stars, when World War II began, she wanted to do her part. She hated Adolf Hitler and everything he was doing to her homeland and all of Europe.

In Vienna, Hedy had been married to a munitions manufacturer. She knew that torpedoes often missed their targets and thought that if they could be controlled by a radio signal, their accuracy could be improved. The problem was, radio signals could be detected or jammed. So Hedy came up with a concept called **spread spectrum communication** or "**frequency hopping**." Hedy had the idea but didn't know how to implement it. For that, she turned to a friend, composer George Antheil. They put their heads together combining her idea of scrambling the signals and his knowledge of music, specifically the working of a player piano.

What do frequency hopping and a player piano have in common?

George thought that the holes in a player piano's music roll could be used as a code. Instead of each hole playing a note, it would represent a different radio frequency. As the roll "played," a message sent through this device would constantly change frequency — or "hop."

Only an identical roll at the receiving end of the transmission, rolled in sync with the sending machine, would be able to decode the signal. This was a way of preventing the enemy from listening in on a transmission, because they couldn't know which frequency would be hopped to next.

Although frequency hopping is commonly used today in cellphone technology, the war department rejected the idea. No one knows why, but some historians have speculated that it was because military leaders just couldn't get past the idea of a player piano guiding torpedoes.

Mothers of INVENTION

What do hang gliders, windshield wipers, shopping bags and Barbie dolls all have in common? All of these were invented by women!

Necessity, they say, is the mother of invention. And among those inventors who have recognized a need and created a solution are a surprising number of women. From a secretary, Bette Nesmith Graham, who invented liquid paper, to a Hollywood starlet, Hedy Lamarr, who helped create a secret communications system that aided in defeating the Nazis, an array of women from all walks of life have joined the ranks of inventors. They are literally the mothers of invention.

When America was founded in 1776, under U.S. law, patents were considered intellectual property. Women were not allowed to own property and therefore couldn't hold a patent. That is, until 14 years later, when the Patent Act of 1790 declared that both women and men could obtain patents in their own names to protect their inventions. It was a step toward equality. But there was a catch. Only women who were single or widowed actually had the legal capability to hold patents. At the time, many state statutes had restrictions for married women. Once a man and woman

married, they became legally one person. Any property that the woman owned before marriage or acquired during marriage essentially belonged to her husband. So in these states, married women patented their inventions under their husband's name or that of a male business associate, or sometimes they didn't patent them at all. Although the Patent Act was passed in 1790, women were either prevented by statute, or persuaded by social pressure, not to pursue patents for almost 20 years.

The first women patent holders

Mary Kies finally changed that.

In 1809, she became the first woman in America to hold a patent. The independent Mary insisted on taking credit for her own work and, though she was married, her native Connecticut had no statute to prevent her from doing so.

Good timing made a success of her invention — a machine for weaving ladies' hats.

At the time, because the U.S. was trying to remain neutral in the Napoleonic Wars, President James Madison had ordered an embargo on European goods. Since no goods were coming into the country there was less competition for Mary's hats. Her hats became extremely popular, and this not only helped to bolster the hat industry but the whole New England economy

SEE **WOMEN** PAGE 3



Hedy Lamarr

WOMEN FROM PAGE 2

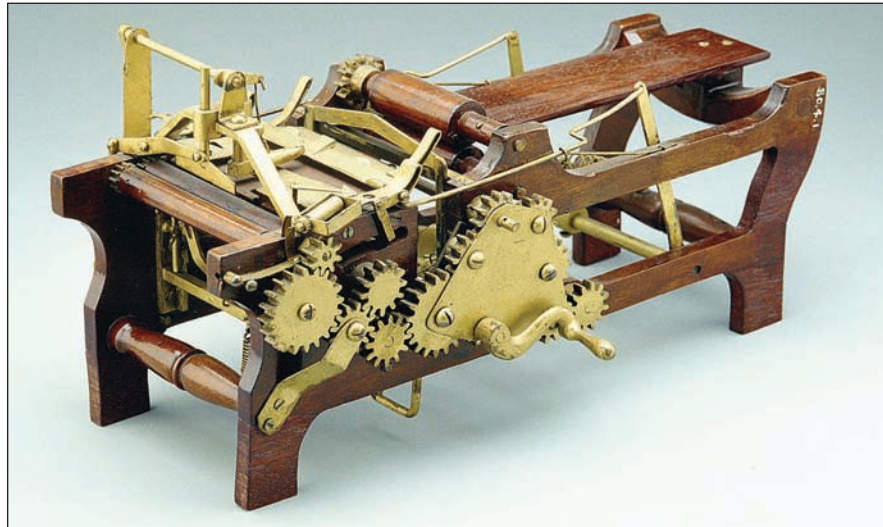
as well. First Lady Dolley Madison honored Mary for her contribution to hatmaking and to the creativity of women.

By the mid-1800s, the industrial revolution was in full swing, especially in the American Northeast. Many women went to work in factories and mills in order to help support their families.

In 1850, Margaret Knight joined this rapidly growing working class. She was only 12 years old. At this point, there were many textile mills in New England. It was generally assumed that any girl from the lower middle classes would eventually go to work in one of these mills. The mills were not particularly pleasant places to work, but working in a mill proved a good move for Margaret, because this gave her an opportunity to explore machinery.

Knight later went to work in a factory that made paper bags. At the time, most bags for toting things, like groceries, were shaped like envelopes. The few square bottomed bags that were available were expensive and handmade. Margaret had been at work for just a week and immediately saw that they needed a machine that could make these square bottomed paper bags. She watched the machinery work and adapted the machines that she had seen, successfully folding flat-bottom paper bags by machine. With absolutely no engineering background, Margaret Knight had succeeded where many men before her had failed.

Knight decided to get a patent, but part of the specification said that she needed a working model cast in iron. She took her wooded model to a professional manufacturer, but before the machinist could work on the model, a local man named Charles Annan saw Margaret's wooden model and studied it over the course of a few months. Charles Annan created and patented a working model of a paper bag machine based on Margaret's design before the machinist got around to making one.



Margaret Knight's paper bag folding machine

When Margaret found out, she set out to prove that the invention was hers. Margaret took Charles Annan to court. The trial lasted about 16 days and cost her about \$1,600, but she was able to prove that she actually had the idea long before Charles had it. Charles Annan's strongest argument for his defense was that since Margaret was a woman, she couldn't have possibly have come up with this mechanical invention. At the time, most people believed that there were two distinct spheres in life, a man's world and a woman's world. It wasn't in the natural order of

things for ladies to be inventors. Nevertheless, Margaret won her case and was awarded this patent in 1873. She went on from there to create more than 90 other inventions and held a total of 87 patents.

The media at the time dubbed Margaret "Lady Edison." At first, the nickname was cute but somewhat demeaning: Who was this little woman

ACTIVITY

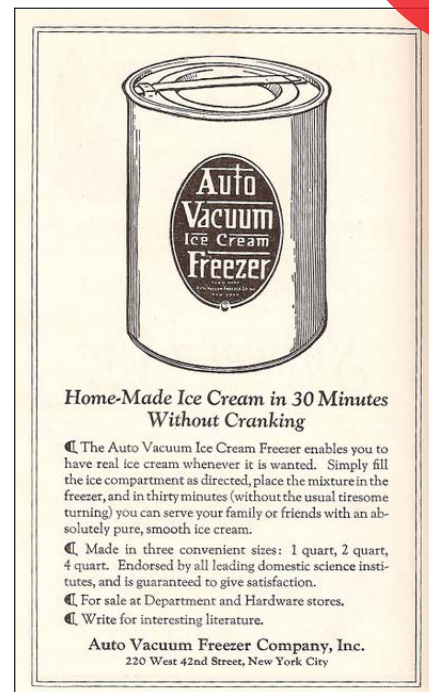
Looking through your newspaper, can you find an article on a woman who has accomplished something admirable living in your area? If so, invite her to speak to your class. Be sure to prepare a list of reporter's questions.

who was trying to emulate the great inventor Thomas Edison? But as more and more women started going public with their inventions, the legion of Lady Edison's began to earn the respect they deserved.

Among them were Amanda Jones, who developed a vacuum process for canning foods, and Beulah Louise Henry, who invented the bobbin-less sewing machine.

As a new century begins, the opportunities for future "mothers of invention" seem greater than ever. Women have made incredible strides over the past 200 years. They have gone from being virtually unheard-of to being credited for a sprinkling of inventions, to running the gamut of all types of inventions in all types of areas.

SOURCE: Adapted from the "Mothers of Invention" show aired on the History Channel.



What's the real cost of your first car?

Seventeen-year-old Maddy bought a car for \$1,800. She was thrilled and felt that she got a great deal on the monthly payment. But six months later, her "really cool car" sits in the driveway most of the time because she can't afford to drive it. Figure out the real cost of car ownership, starting with this list.

Gas. Maddy needs about \$25 every week for the gasoline to drive her car to work and school. You can't control gasoline prices, but compact cars are more fuel-efficient than trucks and vans.

Oil. Changing your oil every three months takes only about 30-45 minutes and \$20-\$30 (a lot less to do it yourself), but the consequences of neglecting it can be costly.

Maintenance. It cost Maddy \$225 to replace her muffler. If you're buying a used car with higher mileage, think about frequently used and exposed parts: exhaust system, windshield wipers, brakes, tires, lights and so on. Repairs can be costly, so be prepared by saving for them.



Each year The National Women's History Project selects a group of notable women who are extraordinary visionaries and role models to honor. This year in keeping with their theme, **"Women Inspiring Innovation Through Imagination: Celebrating Women in Science, Technology, Engineering and Mathematics,"** the honorees chosen represent a remarkable range of accomplishments and a wide diversity of specialties including medicine, robotics, computer programming, atmospheric chemistry, architecture and primatology.

Below is a brief description of a few these honorees. A full list can be found online at www.nwhp.org. Choose one and do some research to find out more about them. Think about what interests you. Could you find a way to develop something you are passionate about into something big or small that would change people's lives?

Hattie Elizabeth Alexander

(1901-1968) Pediatrician and microbiologist

Hattie Alexander developed the first effective remedies for Haemophilus influenzae. Alexander was also among the first scientists to identify and study antibiotic resistance.

Patricia Era Bath

(1942) Ophthalmologist and inventor

Patricia Bath's invention of the Laserphaco Probe was an important milestone in the advent of laser cataract surgery.

Elizabeth Blackwell

(1821-1910) Physician

Elizabeth Blackwell was the first fully accredited female doctor in the United States. She, along with her sister, Emily, founded the first medical school for women.

Katharine Burr Blodgett

(1898-1979) Physicist and inventor

Katharine Blodgett was the first woman awarded a Ph.D. in physics from the University of Cambridge. Blodgett invented low-reflectance "invisible" glass. The legacy of her work is still seen today in camera lenses, computer screens, eyeglasses and many other applications.

Edith Clarke

(1883-1959) Electrical engineer

Edith Clarke was the first woman to earn an M.S. in

electrical engineering from Massachusetts Institute of Technology (1919). She invented the Clarke Calculator and authored an influential textbook on power engineering.

Dian Fossey

(1932-1985) Primatologist and naturalist

Dian Fossey studied, lived among and befriended the gorillas of Rwanda. Her book, "Gorillas in the Mist" (1983) documented her intense study of these animals and the need to protect them from the constant threat of poachers and neglect.

Susan A. Gerbi

(1944) Molecular cell biologist

Susan A. Gerbi is a professor of biochemistry. Her research team devised a method to map the start site of DNA replication at the nucleotide level.

Helen Greiner

(1967) Mechanical engineer and roboticist

Greiner is co-founder and former president/chairman of iRobot Corporation, a world leader in consumer and military robots, and current CEO of CyPhyWorks.

Julia Morgan

(1872-1957) Architect

Julia Morgan was the first woman admitted to the architecture program at l'École nationale supérieure des Beaux-Arts in Paris, and the first woman architect licensed in California. Morgan is best known for her work on Hearst Castle in San Simeon.

Louise Pearce

(1885-1959) Physician and pathologist

Pearce worked on the team that found a cure for African Sleeping Sickness (1919).

Mary G. Ross

(1908-2008) Mechanical engineer

Mary Ross was the first woman engineer at Lockheed's Missiles Systems Division (1952), and the first known Native American woman engineer. At Lockheed, Ross designed missiles and rockets, and developed systems for human space flight and interplanetary missions to Mars and Venus.

Susan Solomon

(1956) Atmospheric Chemist

Susan Solomon's research on chlorofluorocarbons (CFCs) as the cause of the Antarctic ozone hole was part of the basis an international treaty that has regulated damaging chemicals. Solomon is best known for showing that climate changes due to human increases in carbon dioxide will last for more than a thousand years.

Flossie Wong-Staal

(1946) Virologist and molecular biologist

Flossie Wong-Staal was a pioneering researcher of retroviruses and with her team deciphered the structure of the HIV virus as the cause of AIDS. She was the first to clone and complete the genetic mapping of HIV making it possible to develop HIV tests.

CHECK IT OUT



The City Library

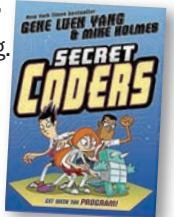
THE SALT LAKE CITY PUBLIC LIBRARY SYSTEM

Look for these inventive technology themed books at your local library.

"Secret Coders,"

by Gene Luag Yang.

Using their wits and their growing prowess with coding, Hopper and her friend Eni are going to solve the mystery of Stately Academy no matter what it takes!



"Little Robot," by Ben Hatke.

When a girl finds an adorable robot in the woods, she accidentally activates him for the first time. But the big, bad robots are coming to collect the little guy.



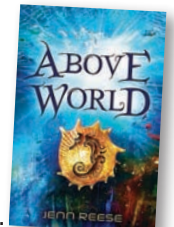
"Minecraft. Redstone Handbook," by Nick Farwell.

Redstone experts guide you through all aspects of working with Redstone including mining, smelting, using repeaters, circuit components and circuit designs.



"Above World,"

by Jenn Reese. A suspenseful sci-fi escapade plucks two children out of the ocean for a thrilling adventure.



"Cyberia," by Chris Lynch.

Zane lives in a completely wired world where a microchip allows the pets to talk. But not all animals are happy to have been domesticated.



CLASSROOM
Connections

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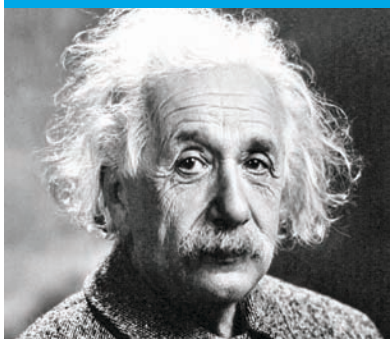
DID YOU KNOW?



The amount of sunlight reaching the Earth's surface is 6,000 times the amount of energy used by all human beings worldwide. The total amount of fossil fuel used by humans since the start of civilization is equivalent to less than 30 days of sunshine.

MARCH

is National Nutrition Month, American Red Cross Month and National Noodle Month. So eat healthy and get your whole wheat noodles on!



MARCH 14

Birthday of Albert Einstein (1879-1955), Scientist, famous for his theories of the structure of the universe.

"Teaching should be such that what is offered is perceived as a valuable gift and not as a hard duty."

— Albert Einstein

"As mad as a hatter"

Meaning

Completely mad. This is now commonly understood to mean crazy, although the original meaning is unclear and may have meant annoyed.



"As mad not as a march hare, but as a madde dogge."

—Sir Thomas More, 1529

The month of March is associated with several famous quotes. The saying "As mad as a March hare" has generated some famous phrases such as "March Madness," which is commonly used to refer to the start of the NCAA basketball tournament.

Origins of "as mad as a March hare"

This saying is centuries old and comes from Europe. In March, hares would conduct their courtship rituals. The males would leap and cavort to attract females' attention. Then they would approach the female, who would "box" with them in an attempt to fight them off, before finally mating. Hares normally keep out of



Help reduce your exposure to fraud

It's important to protect your personal and financial information. Here are a few tips to help you keep tabs on your identity and your money:

Track balances on your financial accounts. If there is a dramatic or unexpected change in an account, this could be a warning signal.

Hang up. It's OK to hang up the phone when strangers call and ask for any type of personal information.

Be wary of using toll-free numbers sent to you. Call your local credit union branch on your own to check on your account status.

Don't open emails unless you know the source. These emails could infect your computer with damaging viruses. It's best to delete the message immediately and never open an attachment from an unknown source.

Report it. If an ATM captures your credit or debit card, call your financial institution immediately to report it and arrange for a replacement card.

Be aware. Don't talk to strangers hanging out by an ATM and never approach an ATM when people are lingering about.



CONTINUED FROM PAGE 1

the way, so the sight of these leaping, cavorting, boxing hares led people to believe that hares went mad in March.

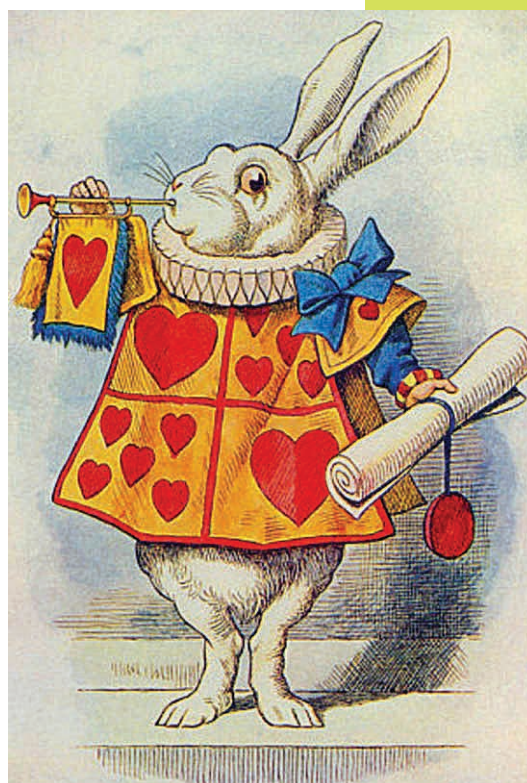
Where is the March hare from?

The March hare is a character in Lewis Carroll's *Alice in Wonderland*, written in 1865. The 2010 film version starring Johnny Depp and Helena Bonham Carter is the most recent of many movie adaptations of the book. Lewis Carroll wanted a historically "mad" character to join the mad hatter at his tea party.

In Carroll's book, the main character, Alice, hypothesizes, "The March Hare will be much the most interesting, and perhaps as this is May it won't be raving mad — at least not so mad as it was in March."



JOHNNY DEPP AS
THE MAD HATTER



SIR JOHN TENNIEL'S OF THE WHITE RABBIT

Mercury poisoning

Mad hatter disease describes the symptoms of mercury poisoning, specifically its effect on the nervous system. These include paraesthesias, vision and hearing impairment, slurred speech, anxiety, hallucinations, irritability, depression, lack of coordination, and tremors.

The condition was observed among workers in the hat-making industry in the 19th century. Chronic mercury exposure was common in hatters who used a mercury solution during the process of curing animal pelts. Poor ventilation in the workshops of the time resulted in the hatters breathing in the fumes of this highly toxic metal, leading to an accumulation of mercury in the workers' bodies. Metal toxicity was poorly understood and the broad range of symptoms were also associated with insanity.

vocabulary

hatter

[hat-er] noun

One whose occupation is the manufacture, sale or repair of hats.

First known use of the word is 14th century.



Renewable energy

Blowing in the wind

CHRISTIE JACKSON

ACTIVITY

When you look at articles in the newspaper, notice how many of them talk about our use of energy. The business pages are a good place to read about energy companies and the prices of different fuels. See how many different kinds of energy you can find.

SINCE ANCIENT TIMES, people have used the wind's energy. Over 5,000 years ago, the Egyptians used wind to sail ships. Later, people built windmills to grind wheat and other grains. On our Western ranches, small windmills are still used to pump water for livestock.

Wind is called a renewable energy source because the wind will blow as long as the sun shines. The sun heats up the air over land, and the warm air rises. Then cooler air from the oceans rushes onto the land. At night, the winds are reversed because the air cools more rapidly over land than over water.

The modern machine to make electricity from the wind is called a wind turbine. It looks like a huge propeller mounted on a pole. A turbine stands as tall as a 20-story building and has

three blades that span 200 feet across. One wind machine can produce enough electricity to power as many as 400 homes.

In windy places like Texas and Montana, dozens of wind machines are grouped in a "wind farm." Throughout the United States we make enough electricity from wind to power a city the size of Chicago.

What will the future bring? If we want to burn less coal and oil, we will have to use more energy from wind, sun, water and nuclear fuel. Some people are concerned because wind turbines can kill a lot of birds and bats. Others think that we will have to build turbines everywhere to make enough energy. As fuel grows more expensive, wind may become cheaper to use. Engineers may also create new inventions to harness power from the wind.



Pinwheels are like wind turbines. They need wind to move. Here's how to make your own.

You will need:

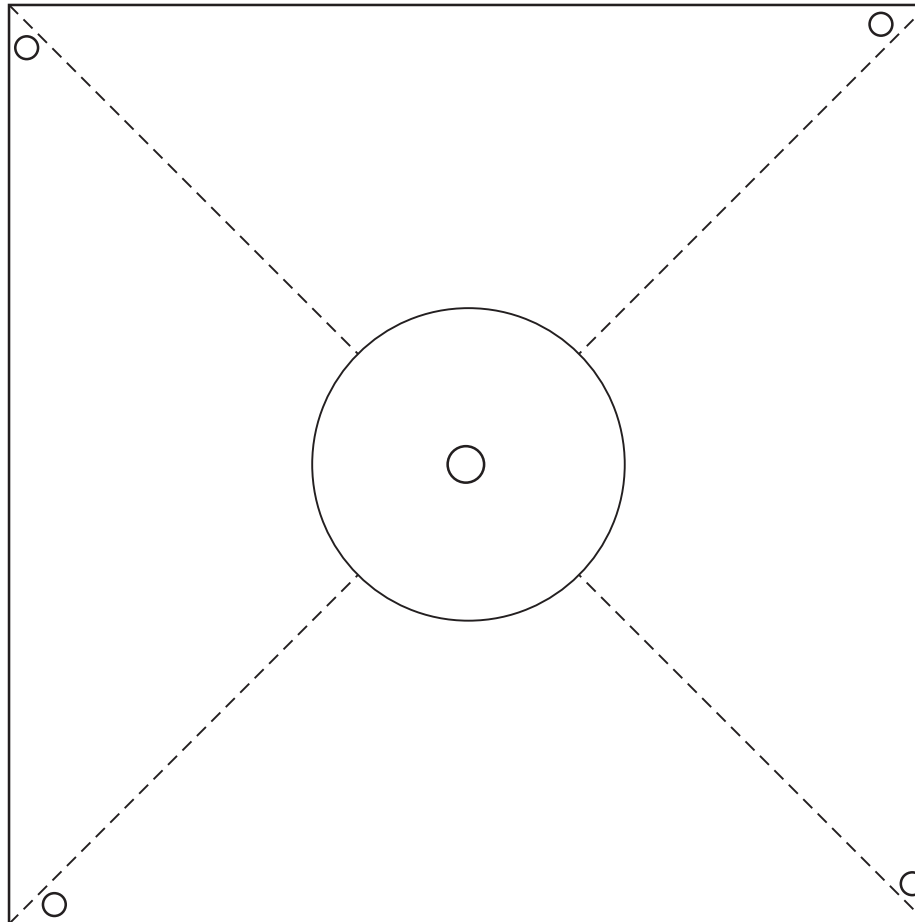
- Scissors
- Thumbtack
- A pencil with an eraser on one end

To make it:

1. Cut out the square and then cut along the dashed lines. Be careful NOT to cut all the way to the center.
2. Punch out the holes with a thumbtack.
3. Curl up the corners. The corner holes should line up with the center hole.
4. Push the thumbtack through all the holes and into the side of the pencil eraser.
5. Hold the pencil and blow straight into the pinwheel so it goes around.

SOURCE: SecondNature, Alliant Energy

Make a pinwheel wind turbine



March word search

ALASKA
ENERGY
HARE
HISTORY
HUSKIES
IDITAROD
INVENTION
MADNESS
MARCH
NOODLE
NUTRITION
PATENT
POWER
WIND
WOMEN

U	I	S	S	E	N	D	A	M	H	Y
W	Q	D	A	W	E	M	P	Z	I	G
O	R	I	I	L	A	X	N	H	S	R
M	T	H	D	T	V	K	U	S	T	E
L	N	O	E	H	A	S	N	E	O	N
U	O	X	M	X	K	R	D	W	R	E
N	U	T	R	I	T	I	O	N	Y	U
A	O	W	E	J	A	M	O	D	I	I
L	K	S	D	N	E	I	P	N	H	W
M	X	S	B	N	T	K	E	X	F	U
P	A	Z	A	N	P	A	T	E	N	T
D	X	R	E	L	B	P	N	H	N	H
X	X	V	C	I	A	O	G	I	H	Q
Z	N	D	Q	H	G	W	E	R	A	H
I	G	H	X	Q	S	E	G	B	G	C
U	M	D	D	O	S	R	B	X	F	K

WORD SEARCH ANSWERS
(Over, Down, Direction)
ALASKA(6,13,NW)
ENERGY(11,6,N)
HARE(11,14,W)
HISTORY(10,1,S)
HUSKIES(9,3,SW)
IDITAROD(2,1,SE)
INVENTION(1,15,NE)
MADNESS(9,1,W)
MARCH(1,10,SE)
NOODLE(1,7,NE)
NUTRITION(1,7,E)
PATENT(6,11,E)
POWER(7,12,S)
WIND(11,9,NW)
WOMEN(9,6,SW)



Read Today

What is Read Today?

Read Today is KSL's high-impact literacy initiative on a mission to **EDUCATE, MOTIVATE and CELEBRATE** Utah's families. Reading is one of the most important foundational skills a child can learn for success throughout life. Research also shows that those children who learn to read before age 9, with the help of involved parents at home, have a much better chance of thriving in school.

The purpose of Read Today is to help students become proficient in reading. And to support Governor Herbert's goal of having 90% of Utah students be proficient readers. KSL Read Today creates awareness, recruits tutors, motivates families through incentives and celebrates success with Chopper 5 landings and literacy events.

To keep your family up to date with what's happening in the news with Read Today, visit readtoday.com



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