

PAL Board Presentations



ASK US WHAT
WE KNOW

IT'S
MORE IMPORTANT
THAN OUR "SHOW"

The **Process** is more
important than the **Product**..



...but creating the **Product**
is part of the **Process**.

Board Necessities

- Title
- Author
- Driving question with answer to driving question
- Information that helped you answer your driving question
- Visual aids (graphs, tables) that show your information
- Sources for print and pictures

TITLE

- clear and easy to read
- creatively shown
- big print



The topic of this PAL is global warming, specifically the warming of the ocean waters. Does she have a catchy title?

WALL OF WATER TSUNAMI

How can a wave do so much
damage?

Big things cause tsunamis so tsunamis have to be big. If tsunamis are big then they are going to be very powerful. Tsunamis can rip roofs of houses and if you can rip roofs of houses you have to be really powerful!



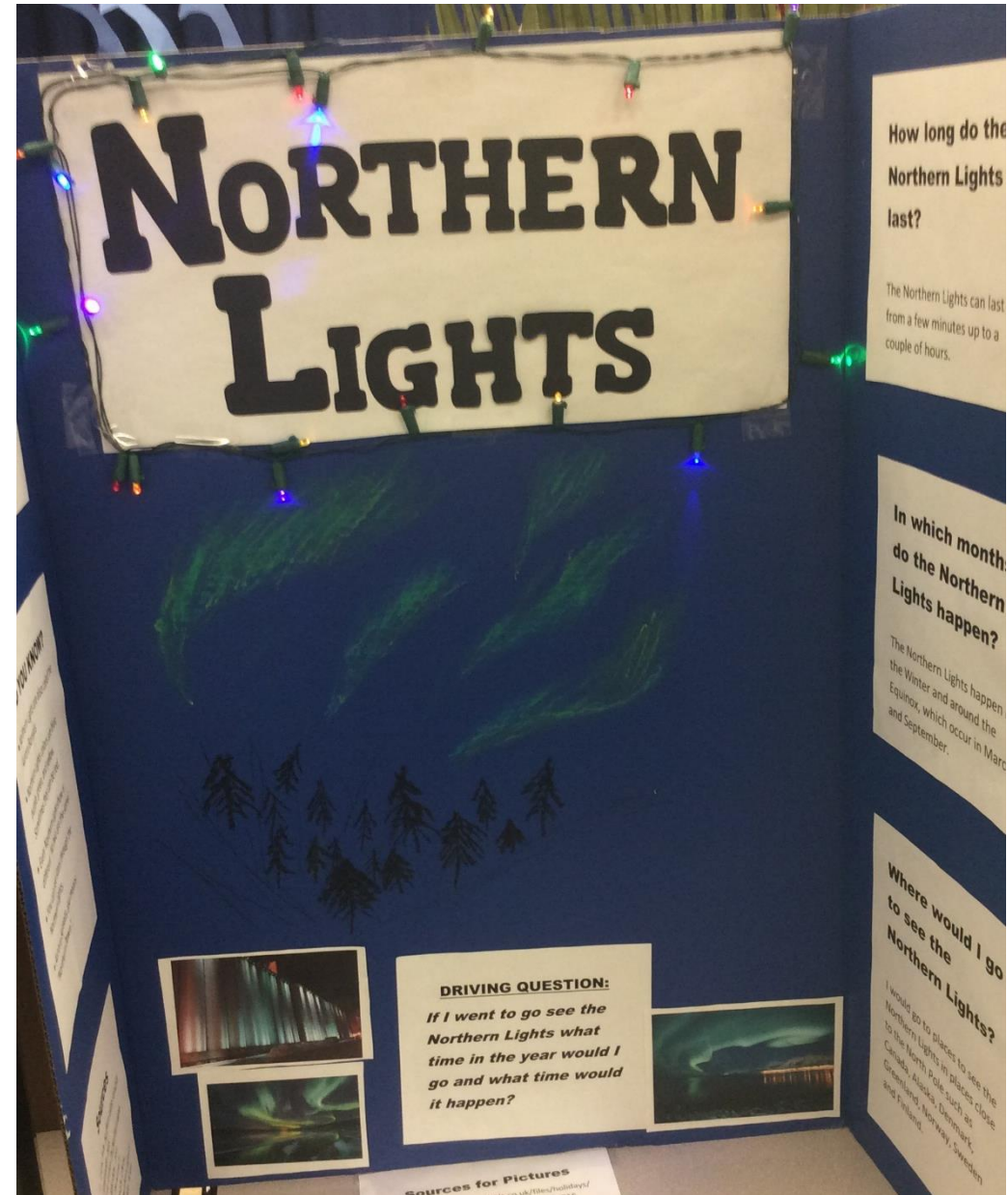
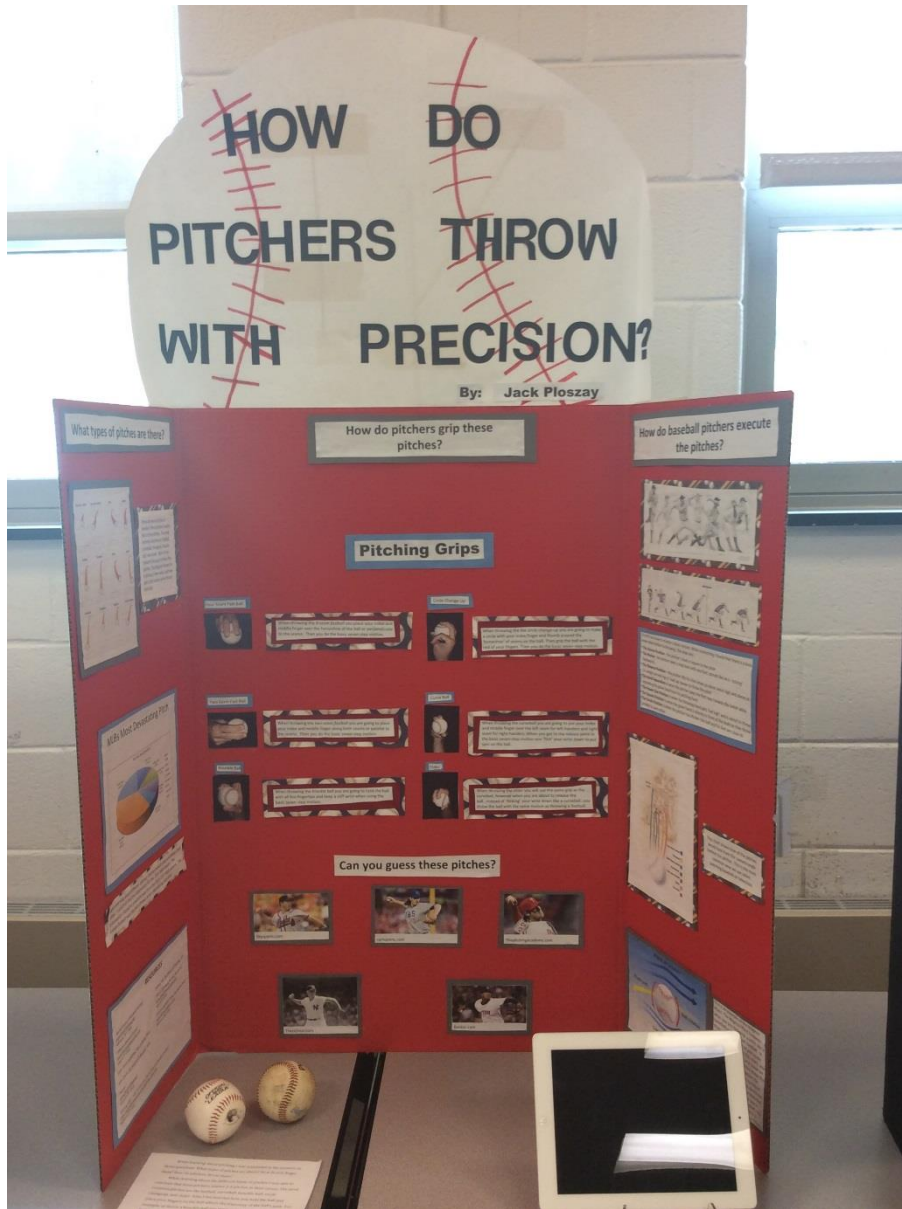
What does a tsunami do to houses?



When a tsunami is powerful that it destroys houses — it picks up them on houses and rips the roofs off the houses. People have to be really powerful to rip roofs off houses and destroy them.



SOURCES



AUTHOR


-seems like a no brainer, right?

We can clearly see the size of the letters of the name on her project.



FOOTBALL HELMETS

DO FOOTBALL HELMETS MAKE FOOTBALL SAFER?



OUTLINE

FOOTBALL CONCUSSIONS AND HEAD INJURIES HAVE BEEN A PROBLEM FOR MANY YEARS. SOME PEOPLE THINK WEARING A HELMET WOULD MAKE PLAYERS FEEL SAFER, BUT OTHERS FEEL HELMETS ARE THE KEY TO FIXING THE ISSUE.

I THINK HELMETS DO KEEP THE PLAYER SAFER THAN NO HELMET, BUT BASED ON THE INFORMATION, IT IS STILL UNCLEAR ON WHETHER OR NOT IT'S BETTER TO WEAR A HELMET.

THE GOOD NEWS IS THAT THERE IS MORE AWARENESS NOW:

- MORE ATTENTION IS BEING PAID TO CONCUSSIONS AND HEAD INJURIES
- MORE SAFETY HELMETS ARE BEING PUT IN PLACE WITH EQUIPMENT AND TRAINING
- MORE STUDIES ARE BEING DONE

BY KEVIN [REDACTED]

WOULD YOU CLONE YOUR PET?

BY: COLE [REDACTED]

CLONING MYTHS BUSTED

SCIENTISTS WILL CLONE DINOSAURS ONE DAY.

I COULD CLONE MYSELF TO DO MY PAL PROJECT.

CLONING ONLY HAPPENS IN A LAB.

WE COULD MAKE A CLONE ARMY.


WHAT IS CLONING?

USING GENES TO MAKE A COPY OF THE SAME ANIMAL

- CLONED ANIMALS HAVE THE SAME DNA
- CLONES HAPPEN IN NATURE WITH IDENTICAL TWINS

HOW DO CLONED ANIMALS LOOK AND ACT?

- CLONES MIGHT LOOK DIFFERENT
- CLONES DON'T ACT THE SAME
- ANIMALS BORN IN THE WILD ACT DIFFERENT THAN ANIMALS BORN IN A HOUSE OR ZOO



EVEN THOUGH THESE CATS ARE CLONES THEY DON'T LOOK THE SAME.

CONCLUSIONS

I WOULD NOT CLONE MY PET BECAUSE:

- CLONING IS EXPENSIVE, IT CAN COST \$50,000
- A CLONED PET MIGHT NOT ACT OR LOOK THE SAME
- SOME CLONES ARE SICK AND DON'T LIVE VERY LONG

WHAT IS THE PROCESS OF CLONING?

CLONING TIMELINE

1952: Scientists in Philadelphia clone tadpoles.

1996: Dolly the sheep is the first cloned mammal born.

1998: More than 50 cloned mice are made in Hawaii.

2001: Noah, a clone of a nearly extinct gaur, is born.

2003: Ditteaux, a cloned endangered African wildcat is born.

2009: Scientists clone an extinct Pyrenean ibex.

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 Jones, Kristin. "Would You Clone Your Dog?" "Scholastic Science." 13 Oct. 2011. 22:22. 2010. Cloning.com. Web. 19 Jan. 2016.
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 Newman-Gray, Alicia A. "Pig Gene Spliced." "Genetic Engineering News." 13 Oct. 2010. 14:30. Cloning.com. Web. 13 Jan. 2016.
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 "Dolly." "World Book Student." World Book. 2014. Web. 23 Jan. 2016.
 "Pig Gene Spliced." "Genetic Engineering News." 13 Oct. 2010. 14:30. Cloning.com. Web. 13 Jan. 2016.

SOURCES

- use the proper format
- for pictures, graphs, tables, and information

Wolves

returning

to

Yellowstone



By: Sophie

Conclusion

In conclusion I think we should help the Wolves return to Yellowstone because they are critical for maintaining the ecosystem, mainly by controlling the animal population and helping the trees grow. Also we killed them off so we should repay the wolves by helping them return to Yellowstone.



Sources

1. Gedaliah, Meish. Gray Wolves Return to Yellowstone. 2008
2. "Reintroduction of the Wolves". www.pbs.org-Jan 22-2016
3. West, Kirsten. "Return of the Wolves". WR science (vol.1 no 6). Dec-2007. 10-18 NRS Discover
4. Westrop, Hugh. "The 14-18 NRS Discover. Web.Feb. 10-2016
5. AP Images. www.classic-images.com on March 5, 2016.

How did the Wolves disappear?

They disappeared because people killed them off. They were hunting farmers livestock because people were killing their prey. People also killed them because they felt they were harmful.

How do Wolves control the animal population?

They control the animal population by preying on many animals like elk, deer, and moose. They also prey on beaver, badgers, rabbits, and squirrels.

Driving Question: Why should we help the Wolves return to Yellowstone?

SOURCES

1. Gedaliah, Meish. Gray Wolves Return to Yellowstone. 2008
2. "Reintroduction of the Wolves". www.pbs.org-Jan 22-2016
3. West, Kirsten. "Return of the Wolves". WR science (vol.1 no 6). Dec-2007. 10-18 NRS Discover
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5. AP Images. www.classic-images.com on March 5, 2016.



ELECTRIC EEL

What do electric eels use their electricity for?

- To kill prey such as shrimp, frogs, turtles, and even small fish.
- To defend themselves from predators.
- Electrolocation, which is similar to echolocation, the method that bats use to see by throwing sound.
- Communication with other electric eels.

Can I survive a shock from an electric eel?

According to the research, you can survive a shock from an electric eel but the electric eel is still very strong so it could hurt you.

How strong is a shock from an electric eel?

The electric eel can generate a shock of up to 600 volts and 1 ampere of current.

Did you know?

- The electric eel is the largest freshwater fish in the world.
- It can live in both fresh and salt water.
- It is found in the Amazon and Orinoco river basins in South America.
- It can live for up to 10 years.
- It is a very important part of the ecosystem.

Sources

1. National Geographic Kids. (2018). Electric Eel. Retrieved from <https://kids.nationalgeographic.com/animals/fish/electric-eel/>

2. BBC Earth. (2017). Electric Eel. Retrieved from https://www.bbc.com/earth/2017/08/170817_electric_eel

3. National Geographic. (2018). Electric Eel. Retrieved from <https://www.nationalgeographic.com/animals/fish/electric-eel/>

4. National Geographic Kids. (2018). Electric Eel. Retrieved from <https://kids.nationalgeographic.com/animals/fish/electric-eel/>

5. National Geographic. (2018). Electric Eel. Retrieved from <https://www.nationalgeographic.com/animals/fish/electric-eel/>

6. National Geographic Kids. (2018). Electric Eel. Retrieved from <https://kids.nationalgeographic.com/animals/fish/electric-eel/>

7. National Geographic. (2018). Electric Eel. Retrieved from <https://www.nationalgeographic.com/animals/fish/electric-eel/>

8. National Geographic Kids. (2018). Electric Eel. Retrieved from <https://kids.nationalgeographic.com/animals/fish/electric-eel/>

9. National Geographic. (2018). Electric Eel. Retrieved from <https://www.nationalgeographic.com/animals/fish/electric-eel/>

10. National Geographic Kids. (2018). Electric Eel. Retrieved from <https://kids.nationalgeographic.com/animals/fish/electric-eel/>

Map of the Amazon and Orinoco River Basins

The map shows the distribution of electric eels in South America, primarily in the Amazon and Orinoco river basins. A red box highlights the area where the electric eel is most commonly found.

Diagram of an Electric Eel

The diagram shows the internal structure of an electric eel, including the head, body, and tail. It highlights the location of the electric organs, which are located in the tail and head regions.

Photographs of Electric Eels

Several photographs of electric eels are included, showing them in their natural habitat. One photo shows an electric eel in a tank, and another shows one in the wild.



WATER

CONSERVATION

How does water pollution occur?

Old storage tanks could leak deadly chemicals into sources of freshwater.

Some factories illegally dump chemicals into rivers nearby.

Certain fertilizers are toxic and can get into freshwater sources.

Fun Fact:
In Charleston, West Virginia, a storage tank filled with deadly chemicals leaked into the city's main water source. Officials had to shut off the water.

How do water shortages affect people?

People might have to walk miles everyday just to get access to clean water.

People could lose their jobs.

People might have to abandon farms or ranches.

...on of Granville ... an energy ... for natural ... methane ... ions ... water.

Why should I be worried about water shortages in different places around the world?

I should be worried about water shortages in different places around the world because if nobody takes care of them, people could get sick or hurt. They could also lose homes, farms, or ranches. That is why I should be worried about water shortages in different places around the world.

How can people help?

People can stop leaving the faucet on while brushing their teeth.

They can collect rainwater for their garden instead of using sprinklers or hoses.

People could fix leaky faucets.

People can use a bucket of water to wash their cars instead of hoses.

How do water shortages occur?

Old pipes leak water, wasting it.

In some places there are not enough water sanitation systems.

Water sources can get polluted by old storage tanks that leak toxic chemicals.

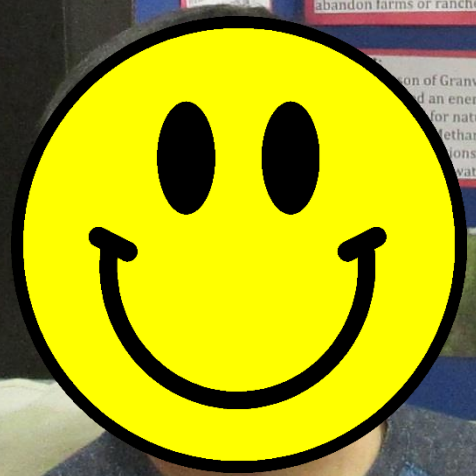
Some companies illegally dump chemicals into freshwater sources that could be used for drinking.

Fun Fact:

The Cayahoga River caught fire ten times between 1868 and 1969 because of factories that dumped chemicals into it.

My Sources

Morgan, Sally. Water For Everyone. 2010.
World Book. 2006. Vol. 90. P. 122.
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Kallen, Stuart. Facing Dry: The Global Water Crisis. 2015.
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Scott, David. "Is our water safe to drink?" Science (March 2, 2013) 1303: 12-13. EBSCO. Web. 14 Feb. 2016.
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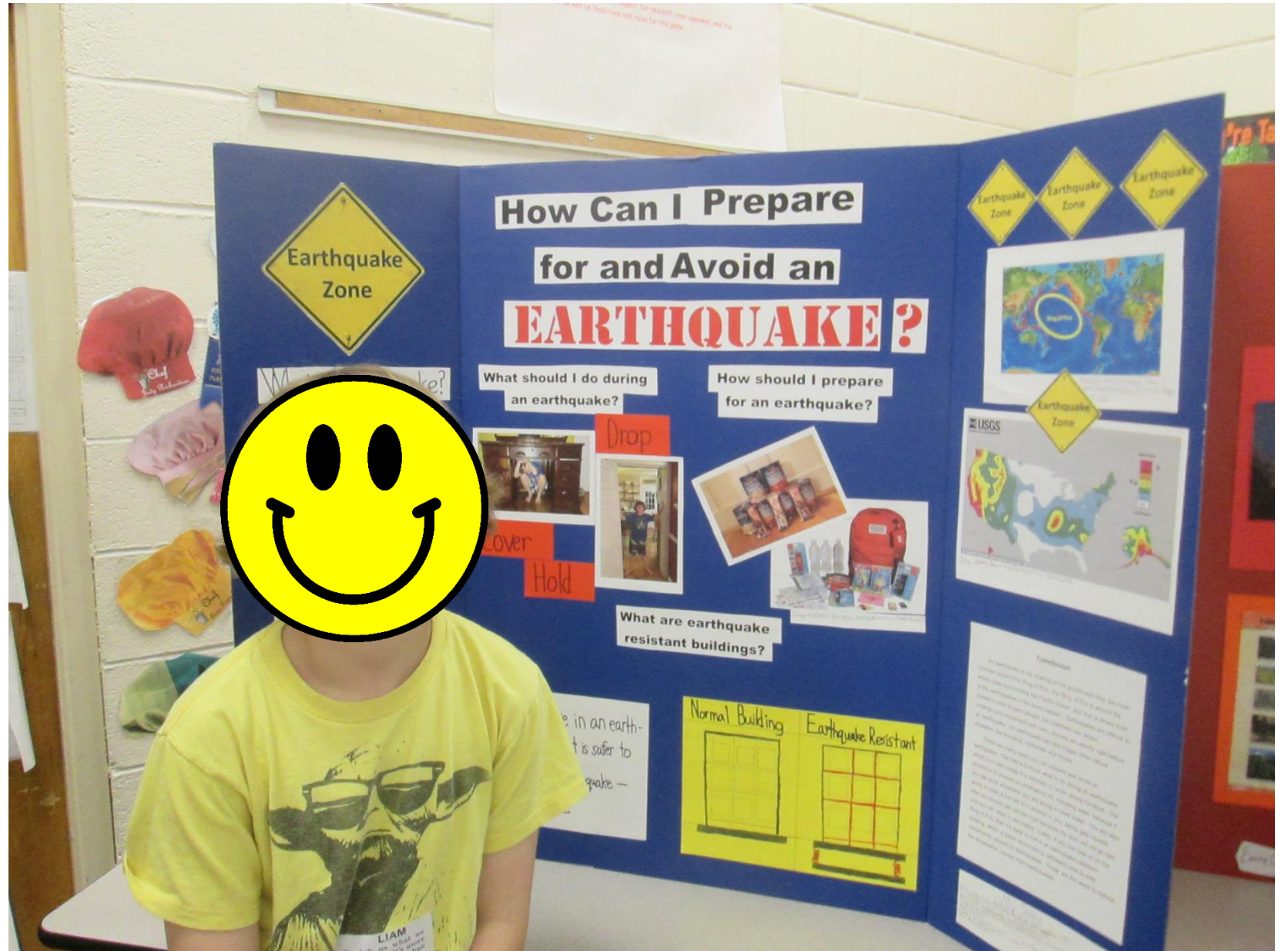


DRIVING QUESTION

with answer

- driving question in big print
- make sure you answer your question 😊

What a
clear
driving
question!



LEFT VS. RIGHT

By: Alexa

If I were left handed, would I be better at music and art?

What are the strengths of people that are left handed?

Left handed people mainly use the right side of their brain which specializes in creative thinking. Their strengths are music, art, and imagination. Some famous left handed people include Leonardo Da Vinci, Ludwig Van Beethoven, and Paul McCartney.



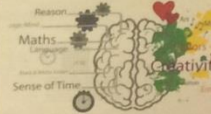
What are the strengths of people that are right handed?

Right handed people mainly use the left side of their brain which specializes in logical thinking and reasoning. Some famous right handed people include Albert Einstein, Thomas Edison, and Benjamin Franklin.



How do you know if you are left or right handed?

World Population - Handedness



Conclusion

Conclusion: I believe that if I were left handed, I would be better at music and art. This is because the right side of the brain, which is used by left-handed people, is specialized in creative thinking and imagination. Some famous left-handed people include Leonardo da Vinci, Ludwig van Beethoven, and Paul McCartney. I believe that if I were left handed, I would be better at music and art.

Sources

Sources: I used the internet to find information about left-handed people and their strengths. I also used a pie chart to show the world population of left-handed and right-handed people. I used a diagram of a brain to show the different regions of the brain and what they are responsible for.



CONCLUSIONS

I WOULD NOT CLONE MY PET BECAUSE:

- CLONING IS EXPENSIVE, IT CAN COST \$50,000
- A CLONED PET MIGHT NOT ACT OR LOOK THE SAME
- SOME CLONES ARE SICK AND DON'T LIVE VERY LONG

WOULD YOU CLONE YOUR PET?


BY: COLE

WHAT IS CLONING?

- USING GENES TO MAKE A COPY OF THE SAME ANIMAL
- CLONED ANIMALS HAVE THE SAME DNA
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HOW DO CLONED ANIMALS LOOK AND ACT?

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SOURCES

Thomas, Heather. Should Scientists Patent Cloning? 2012.
 Simpson, Katherine. Genetics From DNA to Evolution. 2009.
 Ashworth, Cynthia Pratt. Back. The most interesting book ever.
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 "Clay Cats." Scholastic Action (Mag. 28, Aug. 12) 64 Apr. 2005.
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 "Cloning." World Book Student. World Book, 2016. Web. 23 Jan. 2016.
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 Faye Farmer. (2008, September 20). Cloning Twin. ASU - Ask A Biologist. Retrieved January 16, 2016 from http://askabiologist.asu.edu/comments/cloning

SCIENTISTS WILL CLONE DINOSAURS ONE DAY.

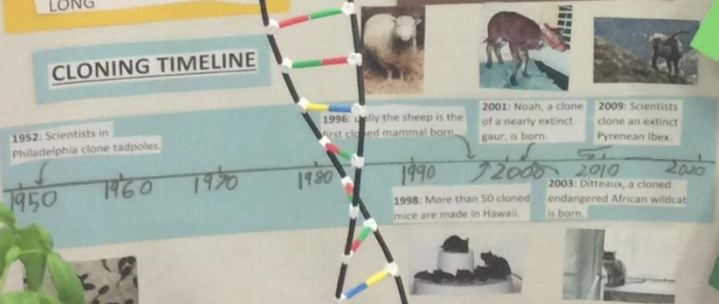
I COULD CLONE MYSELF TO DO MY PAL PROJECT.

CLONING ONLY HAPPENS IN A LAB.

WE COULD MAKE A CLONE ARMY.

WHAT IS THE PROCESS OF CLONING?

CLONING TIMELINE



Information that helped you answer your driving question

- the facts/details that helped you come to your answer
- all information should be RELEVANT

Visual Text Features

- graphs
- maps
- tables
- pictures/photographs
- illustrations
- charts
- only relevant visuals

Do you see this student's visual aids? Her map and Venn diagram help us understand her information.



Do you see this student's visual aids? His pictures, captions, diagrams, and illustrations help the reader to understand the information.

How Can I Prepare for and Avoid an EARTHQUAKE?

Earthquake Zone

What is an earthquake?

An earthquake is the shaking of the ground caused by the movement of two plates underneath the earth's crust.

What should I do during an earthquake?

Drop

Cover

Hold

How should I prepare for an earthquake?

What are earthquake resistant buildings?

Normal Building

Earthquake Resistant

Conclusion

An earthquake is the shaking of the ground and they are most common around the Ring of Fire. The Ring of Fire is around the entire coast surrounding the Pacific Ocean, and that is where most of the earthquakes in the world happen. Earthquakes are difficult to predict in time to warn people, but scientists can detect underground movement and many animals act weirdly right before an earthquake. An earthquake can also trigger other nature disasters like tsunamis, rockslides and floods.

There are many ways you can prepare and avoid an earthquake. The first is to know what to do during an earthquake you get stuck anywhere you are going to need water because if you need a first aid kit if anyone in your family gets injured and you can store it very easily. Lastly, if you live near or on the Ring of Fire, then it's safer to live in an earthquake-resistant building which is better structured to withstand side-to-side movements caused by earthquakes. These are the ways to reduce the devastation caused from earthquakes.

You could use pictures as a text feature.

ECHOLLOCATION

Echolocation

- **Echolocation** is the use of reflected sound waves to determine distances or to locate objects
- Animals, including bats and dolphins, use echolocation to navigate and find food

Support Question #2: What do animals use echolocation for?
Answer: Animals use echolocation to hunt their prey and navigate.

SOURCES

1. [https://www.bbc.com/news/health-15613843](#)
2. [https://www.bbc.com/news/health-15613843](#)
3. [https://www.bbc.com/news/health-15613843](#)
4. [https://www.bbc.com/news/health-15613843](#)
5. [https://www.bbc.com/news/health-15613843](#)
6. [https://www.bbc.com/news/health-15613843](#)
7. [https://www.bbc.com/news/health-15613843](#)
8. [https://www.bbc.com/news/health-15613843](#)
9. [https://www.bbc.com/news/health-15613843](#)
10. [https://www.bbc.com/news/health-15613843](#)

Support Question #1: What is echolocation?
Answer: Echolocation is the use of soundwaves to detect objects.

**By: Dorian Brydie
Room 119
March 2018**

Conclusion:
Driving Question: Why do animals use echolocation?
Answer: Bats, Dolphins and Whales use this special sense to navigate and to find and hunt prey in their dark and murky environments.

Support Question #3: What animals use echolocation?
Answer: The animals that use echolocation are the bat, the dolphin and the whale.

FUN FACT:
Bats use a special bone in their nose called the larynx, or voice box to echolocate.

FUN FACT:
Bats can sense something as small as a human hair using echolocation!!!

Bat uses echolocation to find prey.
Bats send out sound waves using their mouth.
When the sound hits an object, an echo comes back.
The bat can identify an object by the sound.

Sound Pulse Sent Out by Bat

Whales use echolocation to find prey.
Whales use echolocation to find prey in the dark and murky environments.

Whales use echolocation to find prey.
Whales use echolocation to find prey in the dark and murky environments.

Whales use echolocation to find prey.
Whales use echolocation to find prey in the dark and murky environments.

You could use pictures or graphs as a text feature.

Cost to Your Life

Effects of Secondhand Smoke on Children

Effects of Firsthand Smoke on Adults

Cost to the Smoker's Wallet

WHY SHOULD I AVOID SECONDHAND CIGARETTE SMOKE?

Secondhand smoke affects your...

Lungs

- You could get lung cancer or emphysema
- You could get short of breath

Heart

- You could get a heart attack or heart disease
- Your blood vessels could clog

Ears

- You could get ear infections

Head

- You could get really bad headaches
- You could have a stroke

Teeth

- You could get tooth decay
- Your teeth could fall out

Types of Smoke

FIRSTHAND SMOKE

- What the smoker breathes through the cigarette
- Contains nicotine tar, and other poisons

SECONDHAND SMOKE

- Smoke that comes out of a burning cigarette
- Types: 1. Sidestream smoke from a smoker's mouth 2. Exhalation smoke from the end of a cigarette 3. Exhalation smoke from the filter that remains the harmful poisons

THIRDHAND SMOKE

- The residue of smoke that stays on clothes, furniture and skin
- It makes the air and surroundings smell like smoke

CONCLUSION

BY BEN BRAD

You could use pictures as a text feature.

BOATS...

WHY THEY FLOAT

Archimedes Principle
Any object, wholly or partially immersed in a fluid, is buoyed up by a force equal to the weight of the fluid displaced by the object.

Inflated animal skin

C. AD 800 Viking Longship

1990S Lifeboat

Modern Day Materials Used to Build Boats

- Steel
- Fiberglass
- Wood
- Kevlar
- Aluminum

Testing

Gravity Vs. Buoyancy

Density

Displacement

Weight of the boat pushes down

Displaced water pushes up

When water is pushed to the side

When you move around in a small boat you change the center of gravity

Notice that the arrows are not lined up

If the center of gravity (pushing down) is lower than the center of buoyancy (pushing up)

Guess what happened!

The force that pulls everything to Earth

The upward push of water on an object

Make By

Archimedes was the oldest son of a Greek mathematician

If Archimedes was still alive he would be over 2200 years old!

Weight of the boat pushes down

Displaced water pushes up

When water is pushed to the side

When you move around in a small boat you change the center of gravity

Notice that the arrows are not lined up

If the center of gravity (pushing down) is lower than the center of buoyancy (pushing up)

Guess what happened!

The force that pulls everything to Earth

The upward push of water on an object

Gravity Vs. Buoyancy

The upward push of water on an object

Container ships

Cruise ships

Motorboats

Rowboats

Sailboats

Fishermen

Warships

Green

Yellow

Blue

Black

Red

Design Features

- color
- matting
- not too much, not too little
- props
- flip up information

You could be creative with how your title looks. This one relates to the PAL topic.

ECHOLLOCATION

Echolocation

- **Echolocation** is the use of reflected sound waves to determine distances or to locate objects
- Animals, including bats and dolphins, use echolocation to navigate and find food

Support Question #2: What do animals use echolocation for?
Answer: Animals use echolocation to hunt their prey and navigate.

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FUN FACT:
Bats can sense something as small as a human hair using echolocation!!!

Bat sense
Bats use sound waves

When the sound hits an object, an echo comes back.
The bat can identify an object by the sound.

Sound pulses sent out by bat

Whales have a hole in their forehead which is used to breathe.

Bat echolocation

Animals use echolocation

Whale echolocation

Bat echolocation

Whale echolocation

The back of the WHITE board was colored to go with her theme.

I Always See A Rainbow After A Storm ?

By Kaho

My Sources

Clavin Pether: Cloud Collector's Handbook, 2009
Marion B. Jacobs: Why is the Sky Blue?, 1999
Borner: Dig It! "Rainbow" World Book Student World Book 2016, Week 14 Jan. 2016, Pasco/Wash. Jay M. "Spectrum" World Book Student World Book, 2016, Week 4 Feb. 2016, David Whitfield, Rainbows, 2013, David Whitfield, Rainbows, 2007

How to Find a Rainbow

This information will probably be able to help you find a rainbow. Just follow the steps below that tell you how to find a rainbow.

- Step 1: Make sure there is still moisture in the air from a storm. Also, you want it to be a hot summer afternoon or at least a time when the sun is shining hard.
- Step 2: Look at your antler point. Your antler point is what you see when you turn your back to the sun which basically means your shadow.
- Step 3: Then if you look about 42 degrees above your antler point, you should be able to see a primary rainbow. If you look 51 degrees above the antler point you might see a secondary rainbow in between them is The Alexander's Dark Band.

Circumzenithal Arcs

Circumzenithal arcs are like a rainbow but in the sky. The colors of them are the same as rainbows' upside down arcs. They appear high up in the sky.

22 Degree Halo

A 22 degree halo is made of a ring of light that surrounds the sun or moon. It is made of light that has been scattered by ice crystals in the atmosphere. It is a common halo and is often seen in winter months. It is named after Alexander of Aphrodisia, a Greek philosopher.

Bright and Dark

If you have ever seen a rainbow after a storm or in a park, you may have noticed that below or inside the primary rainbow seems brighter than the sky outside or above the rainbow. That is because light that does not part the sky outside or above the rainbow. That is because light that does not part the sky outside or above the rainbow. That is because light that does not part the sky outside or above the rainbow. That is because light that does not part the sky outside or above the rainbow.

What Rainbows Are Made Of

Rainbows are patches of light. They are a spectrum, and the band of colors is called a visible spectrum. White light is a mix of all colors. However, we cannot see the rainbow color and we can only see them as normal sunlight. On the other hand, if it goes through a triangular block of glass called prism, it will turn into a visible spectrum and our eyes will be able to see them in the colors. The colors of the rainbow are made of wavelengths. Red has the longest wavelength and blue and violet has the shortest wavelength.

Why don't I always see a rainbow after a storm?






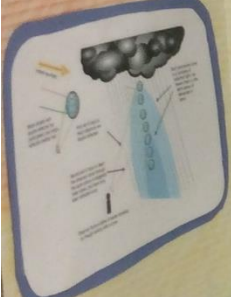

If you like rainbows, I bet you've noticed you don't always see a rainbow after a storm even when it is sunny. That's because most of the times, you need to be facing at a certain place, looking at a certain spot, and it has to be at a certain time. First, you might see a rainbow in a hot summer afternoon. It doesn't always have to be in the summer, but rainbows are more likely to appear in that time of the year. After that, you want to be facing your antler point. The antler point is what you see when you turn your back to the sun, which basically means your shadow. Then, if you look about 42 degrees above the point, you might be able to see a primary rainbow. After that, if you look 51 degrees above the primary rainbow, you may be able to see a secondary rainbow in a primary rainbow, the orders of the colors are red, orange, yellow, green, blue, and then purple. In a secondary bow, the orders are reversed. In between the bows is the Alexander's Dark Band. So, the answer to the question is because there are several steps, and you can't find them just because a storm just passed!

How Rainbows Form

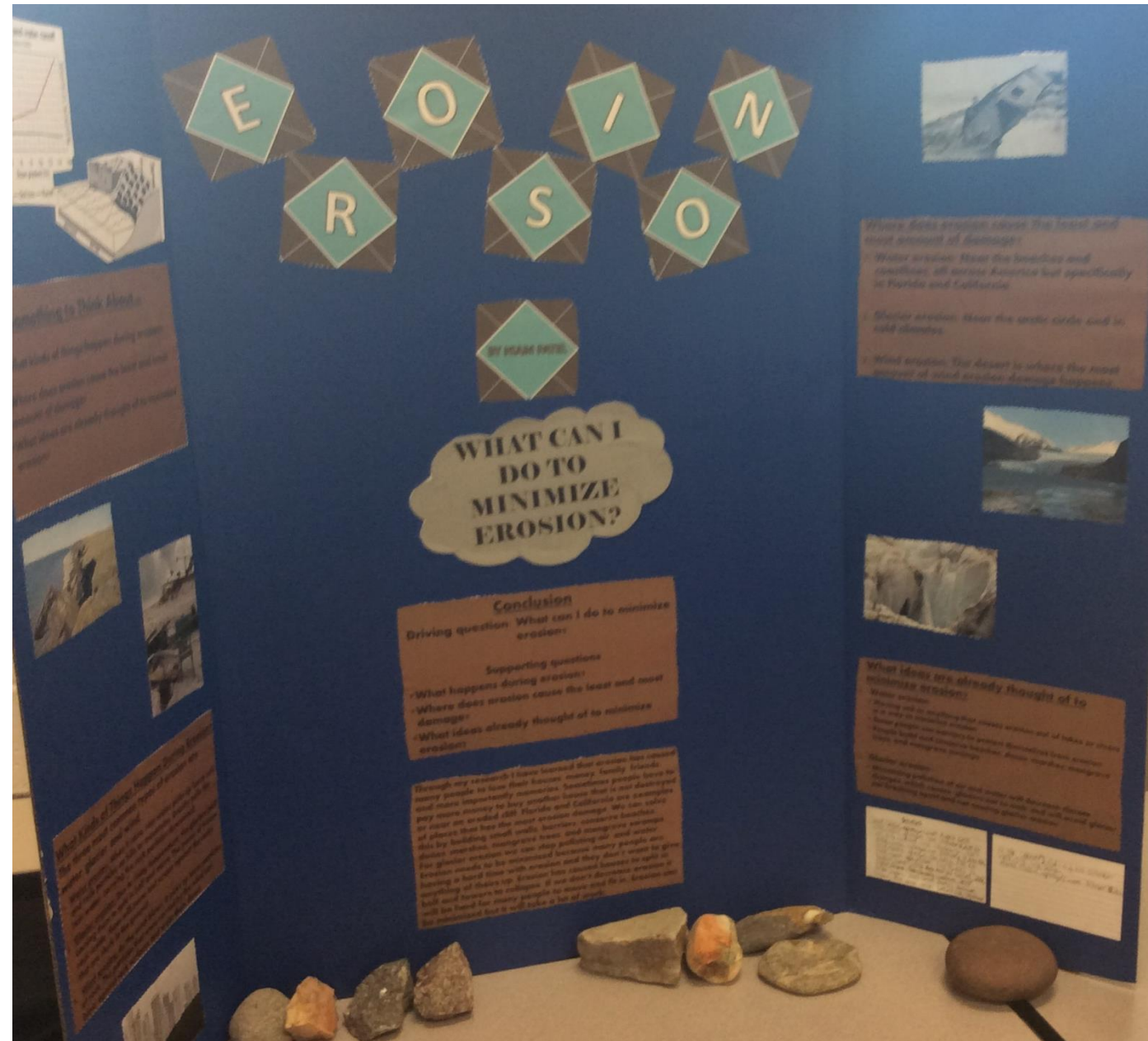
Rainbows usually form in a hot summer afternoon when a storm has just passed when the air is still moist. Clouds' have to be in the summer, but rainbows appear more often in that time of year. They can also form in spring when the sun is shining hard.

Color Rainbows

Rainbows are patches of light. They are a spectrum, and the band of colors is called a visible spectrum. White light is a mix of all colors. However, we cannot see the rainbow color and we can only see them as normal sunlight. On the other hand, if it goes through a triangular block of glass called prism, it will turn into a visible spectrum and our eyes will be able to see them in the colors. The colors of the rainbow are made of wavelengths. Red has the longest wavelength and blue and violet has the shortest wavelength.



The colors chosen on this board go with his theme.



You could put your information under a flip question to make your presentation interactive.



A battery was attached to this board as a prop.

Types of Batteries

Volta's Battery

Modern Battery

How does a battery power my device?

By

How does a circuit work?

Light

Battery

Switch

Wires

Did You Know?

If you touch the poles of a 9V battery in your tongue, you will feel the electric tingle on your tongue.

How does a battery work?

A battery works by creating a flow of electrons. Electrons come from one "pole" and move through a conductor to the other "pole." Some of the electrons are used by a device as they flow through the circuit. The device changes the electrons into something useful (e.g. light, sound, motion, heat). The electrons that were not used to power the device are pushed back into the battery and pushed back into the circuit with newly refreshed electrons. When all the electrons are used up the battery "dies."

Batteries store or make electrons.

Makers pull electrons out of atoms.

Other batteries store electrons inside using chemicals.

My Conclusions

My conclusion is that batteries use chemicals to create or store electrons. The batteries that create use special chemicals to pull electrons out of atoms and push them into a circuit. The batteries that store them use chemicals to store electrons inside the battery and to push them into a circuit. Wet cell batteries use liquid chemicals and dry cells use paste like ones. The electrons flow through the circuit and if the device is a light bulb the electrons make it light up using some of the electrons. The electrons that were not used are pushed back into the battery. The battery "dies" when it runs out of electrons.

A prop was used to show a hot air balloon.



A prop was used to show nonperishable foods.

Hurricanes

How do Hurricanes Affect People's Lives?

Protecting Your Home

After the Storm

Facts About Hurricanes:

- Hurricanes are the largest storms on earth.
- Winds blow in a circle towards the middle of the storm that spins a hurricane at perhaps 60 mph.
- The eye **is** the most dangerous part of the hurricane. Winds can blow up to 300 miles an hour.
- The eye is in the middle of the hurricane. It is the calmest part. It can be 20 miles wide.
- Hurricanes have 5 Categories that measure how strong they are:
 - 1. Category 1 winds: 74 - 95 mph
 - 2. Category 2 winds: 96 - 110 mph
 - 3. Category 3 winds: 111 - 130 mph
 - 4. Category 4 winds: 131 - 155 mph
 - 5. Category 5 winds: Over 155 mph

Cool Facts About Me!

- I was born on August 28, 2000 when Hurricane Katrina hit New Orleans.
- 3 weeks after I was born I had my first hurricane - Hurricane Rita.
- 7 weeks later, on October 24th, I died through a Category 3 hurricane - Hurricane Wilma. I was only 10 weeks old.
- We lived at Boca Station. Florida died but power was 2 days.

How to Protect Your House:

- Build a storming wall to keep the water out.
- Secure up windows to protect the from flying debris or have shutters open.
- Get clean beds that might get power lines if they fall.
- Put away all of your outdoor furniture, toys and anything that could be blown or broken away.

How People Get Help After the Hurricane:

- Police workers, such as firefighters and police men, will help people and help happen in their house.
- Construction workers come on back if there is flooding in hurricanes to fix people to safety.
- Local organizations will help to clean up and rebuild. They will also bring food, water and give people and put a place to sleep.
- Red Cross - Federal Emergency Management Agency (FEMA) - National Hurricane Center

Logos: American Red Cross, FEMA, Red Cross

Images: Hurricane eye, Hurricane Rita, Hurricane Wilma, Hurricane Katrina

Prop: A black tarp is draped over a table. On the table are several items: a yellow flashlight, a container of Cheerios cereal, a container of snacks, a box of Dips, and some other small items.

Notice that all of these pictures have been backed with construction paper to make them “pop” to the reader.

AND!!! Look at the cool diagram showing the layers of the earth.

