

This or That

Happy Spring Break! Pick one activity to do each day and send a picture to your teacher!

Monday

Cleaning Pennies Experiment

Supplies: dirty pennies, salt, vinegar, small cup, paper towels

1. Pour $\frac{1}{4}$ cup of vinegar in a small cup. Warm in the microwave for 15 seconds.
2. Add 1 teaspoon of salt to the vinegar and mix to dissolve the salt.
3. Drop the dirty pennies into the vinegar and wait 5 minutes.
4. Dry the pennies with a paper towel. Are they cleaner than before?
5. If you want to try it again, repeat steps 1-4, but use lemon juice instead of vinegar.
6. Which one worked better? Have fun!

Build a Birds Nest

Using materials, you found in your yard build a bird nest and send me a picture.

Suggested Nesting materials are

- straw
- twigs
- dry grass
- dog hair
- dry leaves
- shredded paper

Alternative – Use a whisk or small crate to stuff the materials in and hang it off a tree. The birds will come to it and grab the materials to build their own nest.

Tuesday

Living Room Campout

Build a fort/tent in your living room using pillows, chairs, and blankets. What types of animals would you see or hear? Draw a picture of what your campsite would look like in the middle of the woods.

Eggshell Geodes



Ingredients and Supplies

- Eggs
- Rock Salt
- Sea Salt
- **Borax***
- Other substance that could be tested for crystallization such as sugar, epsom salts, cream of tartar, baking soda, or **alum***
- Mini-muffin pan or empty egg carton
- 3 mugs
- Measuring cup
- Pot to heat the water in
- Food Coloring

*** Borax and alum are not food products, and using these ingredients with small children should be closely monitored, as ingestion can be fatal. Please use common sense and close supervision with such substances.**

Directions:

1. Tap a **knife around the top of the eggs** to remove a bit of shell, and then emptied the eggs and cleaned them with water. Using a finger, it's important to gently rub around the inside of the egg to **remove the membrane** because the membrane can discolor crystals as the form.
2. Put them in a **mini-cupcake pan or back into an empty egg carton**.
3. Heat a pot of water (not quite boiling) and then pour 1/2 cup into a mug. Add 1/4 cup of kosher salt into the first mug and mixed it until it dissolved. (The kosher salt is stubborn and may not dissolve, so it may need some rigorous mixing. If it doesn't dissolve all the way it is no big deal)
4. In the next mug add 1/2 cup hot water + 1/4 cup sea salt. The sea salt will dissolve quickly so add a bit more a little at a time. The idea is to saturate the solution without putting in too much of the dry ingredient.
5. In the final mug: 1/2 cup hot water + 1/4 cup borax. Dissolved.
6. Add a couple drops of food coloring into each mug and then make a chart so you don't lose track.
7. Then pour the liquid into your eggs. Each solution should make just enough to pour into two eggs.
8. And then wait. 5 days for the liquid to mostly evaporate. (Which means they should be ready by Easter!)
9. Record what you see happening on the eggs every day and take a picture of your observations.
10. And of course, things like this are irresistible to little hands. Students may want to pick all the crystals off the shells. Be careful because the shells will break all over the place, and if you are using Borax students need to make sure they wash their hands after.

<https://tinkerlab.com/experiment-egg-geodes/>

Wednesday

DIY Paper Towel Face Mask

Supplies: 2 paper towels, staples, 2 rubber bands

<https://www.youtube.com/watch?v=u9MnDsUyYAA&feature=share>

Walking Rainbow



Setting Up the Rainbow Science Experiment

Supplies Needed:

- Printable walking water recording sheets (button to download at the bottom of the post)
- Small plastic cups or glasses
- Paper towels (*read my tips below for picking the right ones)
- Food coloring in primary colors
- Water

* The pick-a-size paper towels are best because then you just use half sheets for each cup. If you only have full sheets, then cut them in half. I've also heard that more absorbent paper towels work better too. I buy the cheap store brand ones, and our water moved pretty quickly from cup to cup, so I am not sure how important that is. It may have went quicker with something more absorbent though.

1. Print out the recording sheets and make copies, if needed.
2. Place 7 cups in a row and pour water in the 1st, 3rd, 5th, and 7th cup. My cups were about 3/4 full. I have since heard that fuller is better.
3. Add 5 drops of red food coloring to the 1st cup and the 7th cup.
4. Add 5 drops of yellow food coloring to the 3rd cup.
5. Add 5 drops of blue food coloring to the 5th cup.

Doing the Walking Water Experiment

You want to try to use the same amount of food coloring in each cup. When I did this with my kids they did drop an extra one or two in since they can't control it well, but I just added a drop or two more to the others to even it out.

6. Take a half sheet of paper towel and fold it in half lengthwise and in half again lengthwise.
 7. Trim off some of the length so that there isn't too much excess paper towel that will stick up in the air between each cup. This will make the water walk more quickly.
 8. Place one half of a rolled paper towel in the 1st cup and place the other half in the cup next to it. Then another paper towel from 2nd cup and into the 3rd cup. This continues until you have placed the last paper towel that drapes over from the 6th cup to the 7th cup.
 9. Stare at the cups and watch what starts happening. You should quickly be able to see the colored water begin to crawl up the paper towel.
 10. Don't forget to do the first part of the recording sheet. Students will predict what they think will happen.
- Keep checking back every couple of minutes. Soon you will be able to see that the water has crawled all the way up the paper towel and is beginning to walk back down into the empty cup next to it.
- Since the cup on either side of an empty cup has colored water in it, the two colors begin to mix in the empty cup. So cool!
- Keep coming back throughout the two hours or soon and observe what is happening.

Question to Ask

What do you think will happen to the water?

What is happening now?

Why do you think the colors are changing?

Why might the water be able to move up against gravity like that?

<https://funlearningforkids.com/rainbow-walking-water-science-experiment-kids/>

Thursday

Shadow Drawing

Supplies: plastic or stuffed animal, paper, pencil/markers, a sunny day

1. Gather your materials and take them outside onto a sidewalk or driveway.
2. Set your animal on the ground so it makes a shadow.
3. Place your paper on the ground where the shadow was made.
4. Trace the shadow.
5. Take it back inside and add details or color it.

Your challenge is to take a family walk around your neighborhood and find the most items on the scavenger hunt checklist. No running ahead!

A Colored Front Door (no black, brown, or white)				
A Delivery Truck (Amazon, UPS, FedEx)				
An American Flag				
A Statue of An Animal				
Someone Walking a Baby				
An Address with Double Numbers (ex.1225)				
A Squirrel				
An Uber or Lyft Vehicle				
A Cactus or Spiky Plant				
A Dog Doing Their Business (ew, gross!)				
A Swing Set or Playhouse				
The Sound of Music Playing				
A Motorcycle				
A Piece of Sports Equipment				
An Out of State License Plate				

Friday

Magical Moving Milk

Supplies: milk, food coloring, dish soap, & cotton swabs

1. Pour just enough milk into a bowl to cover the bottom.
2. Add a few drops of food coloring (different colors) and make sure they don't touch each other.
3. Dip a cotton swab into the dish soap.
4. Stick the cotton swab into the middle of the dish for about 10 seconds and watch the reaction.
5. Keep trying with different swabs in different places of the bowl!
6. Pretty cool, huh?

AIR PRESSURE BALLOON SCIENCE EXPERIMENT

Supplies: balloon, empty plastic bottle, 2 pans, hot water (ask parent permission), ice

1. Tie a balloon onto a bottle
2. Fill up a dish/container/pan with hot water (have an adult help you)
3. Fill up dish/container/pan with cold ice.

When you put the balloon bottle in hot water the balloon inflates!



Have A Great Spring Break!