

## Week 4-6 Science Work

### Week 4

#### THINK like a Scientist!

##### Choose 2 science learning opportunities for the week.

- **Chromatography** is a technique for separating mixtures. Get 3 different kinds of pens/markers and a coffee filter. Cut the coffee filter into 3 strips. Place a dot/line from one pen about  $\frac{1}{4}$  the way up on one coffee filter strip and a dot/line from the other two pens on the other two coffee filter strips. Put water into a small clear container and place the end closest to the pen dot into the water, but don't let the dot/line go under water. You can hold the coffee filter strip or you can design a way to keep only one end of the paper in the water. Make a prediction of what you will see. Then watch what happens as the water moves up the coffee filter. Record your observations.
- **Riddles:** I have soft fur, I have big feet and ears, I hop and I have a fuzzy tail. What am I? A rabbit! That was easy. Now you try to make up three riddles about your favorite animals or other topics. Try them out on your family members or call a friend to see if they can solve your riddle.



**Solving Mysteries** is fun. If you have the game "Clue", play it with your family and as you play, create an Evidence Board with all your clues.

- **I Spy Birds:** Go outside, make a list of all the birds you see with or without binoculars. Do this every day this week and record your results. To identify your birds, you can ask an adult or download the free app, Merlin Bird ID.

### Week 5

#### THINK like a Scientist!

##### Choose 2 learning opportunities for the week.

- **Compare/Contrast:** Before watching *NOVA Inside Animal Minds: Dogs and Super Senses*, draw a T-chart. On the left-side draw an image of a dog. On the right-side draw an image of a wolf. After watching the video, compare and contrast the super senses of a dog versus a wolf
- **Coral Reef:** After watching the video *Changing Seas: Corals in Crisis*, draw and color a coral reef ecosystem. Include fish, plants and etc. Identify how fish use the coral reefs for survival. Challenge: Build a coral reef diorama (see link [Build a Coral Reef Diorama](#))
- **Design a Code:** After viewing the *SciGirls: Code Concert*, design your own code to give a set of instructions for something to move through a grid, to color a drawing, or create your own idea.
  - **Make a prism** with commonly found objects. Use the sun as an alternate source of white light. Set a drinking glass half filled with water on the edge of a window sill and adjust its position to get the sunlight to make the prism effect on a sheet of white paper. You can also make a prism using a CD. Poke a small hole in a piece of aluminum foil and fold the foil over a flashlight. Shine the flashlight on the back of the CD and rotate until you see the prism effect. Record your observations in your science notebook.
- **Reflection:** Using different types of reflective materials like a mirror, place them in the garden and make observations of the reflections and shadows cast by the different materials on the plants. Record in your science notebook.



Week 6 Science- Please read the article about the legend of the rainbow on the next page and answer the questions.

# *Adapted from a Native American Legend*

Once upon a time all of the colors started to argue. Green, blue, yellow, orange, red, indigo, and violet fought over who was the most beautiful. Each color wanted to be everyone's favorite. Green spoke first. "Look around you. See the grass and the trees. I am the color of Earth. Without me, no animal could live. Look at the farms in the countryside. Look at the forests. I am more places on Earth than any of you."

Blue broke in with a joke. "You are only Green with envy." All of the colors laughed. Blue was the friendliest of the colors. He continued, "You may be on land, but think of me! I am the color of the ocean and the sky. I am the water people drink and the air they breathe. I am the rain that makes trees and flowers grow. I bring kindness and serenity."

Yellow danced around and said, "Yes! You may be the color of the sky, but the sky would never be blue without me! I splash the world with puddles of sunlight, not rain! I bring happiness. Without me, Green, your grass would never grow. I am sunflowers, sunshine, and smiles!"

Orange came next. In a very serious voice, Orange said, "Yellow, you play too much. I am the most beautiful. Who has never paused to see a beautiful

sunset? I bring happiness at the end of the day. I am rare, but precious, like a great gem.”

Then Red interrupted with a yell, “Listen to me! I am strength! I am power in battle. I am the color of blood that pumps in the heart and brings life. I am fire and passion. Who could ever fall in love without red? Who could ever smell the beautiful rose?”

Purple spoke and everyone listened. Purple was very respected among the colors. “Colors, I am the color of royalty. My depth is great. I combine the power of Red with the kindness of Blue. Through the ages, I have been the color of wisdom.”

Finally, the timid voice of Indigo joined the conversation. Indigo was quiet, but determined. “I, too, am important. I am the color that fills the sky before blackness. I am the color in the depths of the sea. The deepest thoughts are shaded Indigo. I bring philosophy.” The colors kept quarreling. They all started speaking at once. Rain heard the noise and became angry. He made lightning crash from the sky. All the colors huddled together in fear. Rain scolded the colors: “What are you fighting about? You are all special. You are all different. None of you is the best. Without all of the colors, the world would be sad.”

Rain told the colors to hold hands as a sign that they were friends again. But Rain would not let the colors forget his lesson. From then on, after big storms,

Rain made the colors join hands in the sky. In the rainbow, all the colors are together as a symbol of peace and hope. © 2012 ReadWorks®, Inc. All rights reserved.

1. What happened first?

- A. The colors became afraid.
- B. Rain lectured the colors.
- C. The colors joined hands.
- D. Rain made a crash of lightning.

2. In the legend, what is the cause of rainbows?

- A. Rain teaching the colors a lesson
- B. Lightning crashing from the sky
- C. Colors unable to agree on which is most beautiful
- D. Blue is the color of the rain, sea, and sky

Answer 3. What does Green mean when he says, "No animal could live without me"?

- A. Green is the favorite color of animals.
- B. Animals need farms to live.
- C. Animals need green plants to eat.
- D. Animals can only see green

Answer **4.** To be “Green with envy” means . . .

- A. to be green
- B. to want money
- C. to be jealous
- D. to grow

Answer **5.** This passage is mostly about

- A. Native American traditions
- B. why there are rainbows
- C. why indigo is the most important color
- D. different legends about rainbows

Answer

**6.** Why does Orange think that he is the most beautiful?

(written answer)

Answer

**7.** In the legend, why does Rain make lightning crash from the sky?

(written answer)

Answer **8**. The question below is an incomplete sentence. Choose the answer that best completes the sentence.

Rain made all of the colors form a rainbow \_\_\_\_\_ they were arguing.

- A. also
- B. without
- C. while
- D. because