



Wild for Water Grades PreK - 2nd Grade

This Lesson is written to be directed and supervised by a parent or adult and is recommended for children in PreK to 2nd Grade

In this Lesson Plan, children and adults will learn about the water cycle and the major waterways in Missouri by listening and reading books, exploring databases, inventing something, and more! This Lesson can be simplified or made more complicated as desired.

This lesson contains activities that have been connected to Missouri Learning Standards using the Missouri Department of Elementary and Secondary Education (DESE) guidelines. Although these lessons have been connected to a state learning standard, they are not intended to replace the educational curriculum provided through public, private, or at-home learning.

To access videos and databases, click on the hyperlinked text in the lesson plan. An active Christian County Library card is necessary to access select activities. For help, email youthservices@christiancountylibrary.org or call your local community branch.

1. Introduction

- a. In this lesson you will learn about the water cycle and about major Missouri waterways.
- b. Make sure to have the documents and handouts ready for the lesson and gather any needed supplies.
- c. Use Handout A to record the weather each day for a week. Draw pictures of what the weather is like each day.
- d. Using Handout B, record how many rainy, snowy, sunny, or partly cloudy days there were in the week.
 - i. DESE Standard: Science K.ESS2.D.1 Weather and Climate
 - ii. DESE Standard: Math 1.DS.A.1 Data and Statistics

2. Listen & Write

a. Listen to a library staff member read "Blue on Blue" by Dianne White:

https://www.youtube.com/watch?v=mw5GogAuqYo

- Talk about what happens at the beginning, middle, and end of the story. Do the characters learn something by the end? If so, what do they learn?
- ii. DESE Standard: 1A.Gr1.e Reading

3. Art & Imagination

- a. Use Explora to learn more about the water cycle! Go to christiancountylibrary.org, then click on research. Scroll down to "Explora Elementary" and click on the link. Search for the word "water cycle". Look through the books and articles to learn the different parts of the water cycle. (If you don't have access to the internet, check out a book about the water cycle from your library to do your research instead.)
- b. Craft prompt: Create your own Diagram of the water cycle using a combination of different materials and tools. Examples: crayons, marker, paint, newspaper, construction paper, magazines, etc.
 - i. DESE Standard: VA:Cr2A.1 Skill Acquisition



- c. Additional craft prompt: Using a combination of different materials and tools, create a 3D rainbow craft. For inspiration examples please see Handout C.
 - i. DESE Standard: VA:Cr2A.1 Skill Acquisition

4. STEAM Activity

- a. After completing your own diagram of the water cycle in the above activity you can now make your own science experiment to observe the different parts of the water cycle by creating a water cycle in a bag.
 - i. To create the water cycle in a bag you will need a plastic sandwich bag, a marker, masking tape and water.
 - Follow the instructions on Handout D to make your own Water Cycle in a Bag. Observe the bag throughout the day (for several days) to see how the water moves.
 - iii. Need more help? Check out this link to Mobile Ed. Productions for a step by step guide with pictures on how to create your Water Cycle in a Bag: <u>https://www.mobileedproductions.com/blog/how-to-makea-water-cycle-in-a-bag</u>
 - 1. DESE Standard: Science 3.PS1.A.1 Structures and Properties of Matter

5. Geography

- a. Use Explora to learn more about Missouri! Go to christiancountylibrary.org, click on research. Scroll down to "Explora Elementary" and click on the link. Search for the word "Missouri". Look through the books, articles, and videos to a map of Missouri that includes rivers and cities.
- b. Activity: Using Handout E draw in the Mississippi and Missouri Rivers. Label the two largest cities in Missouri and the capitol city then color in the Map of Missouri.
 - i. DESE Standard: Social Studies 5.B.1



6. Music

- a. Watch "The Itsy Bitsy Spider" on tumblebooks.
 - i. Go to https://christiancountylibrary.org/research . Scroll down to Tumblebooks. Once you are on tumblebooks click "tumblesearch" in the top right hand corner. Type the word *itsy* in the "search by title" box. Click on "Play Video" to have the story read to you. (*If you don't have access to the internet, check out a book about children's songs and rhymes from your library instead.*)
 - ii. Sing the Itsy, Bitsy Spider at different speeds. How does the feeling or tone of the song change as you sing it faster and slower? Can you improvise a drum and beat out each syllable? (ex. *Its-y*, *bit-sy spi-der*)
 - 1. DESE Standard: Fine Arts: Music Pr4C.1a Select, analyze, and interpret artistic work for presentation

7. Additional Activity

- a. Activity: Create a Water Gauge
 - i. Create your own rain gauge to measure how much precipitation falls when it rains. You will need a clear container (like an empty 2 liter bottle), scissors, tape, a ruler, markers, and water.
 - Follow the instructions on Handout F to create your own Rain Gauge and then set your rain gauge outside to measure the rain.
 - To watch a video of How to Make a Rain Gauge check out this link to NBC Connecticut's youtube page: <u>https://www.youtube.com/watch?v=jwo2XGBABpY</u>

Explore more! Here are some optional links for more learning and fun!

- If you enjoyed this lesson go to christiancountylibrary.org to check out our other Lessons with the Library. <u>https://christiancountylibrary.org/lessons/</u>
- PBSKids page for Earth and Space Science. Look at the Earth's Hydrosphere section and click on the Water Cycle to see cool weather videos!

https://optv.pbslearningmedia.org/subjects/science/earth-and-sp ace-science/

> Learning Standard

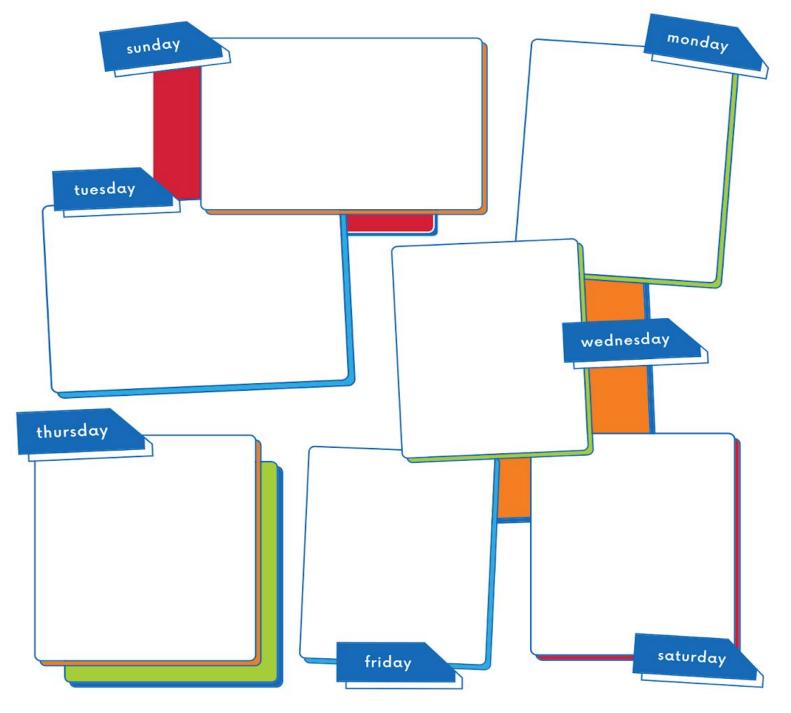
- a. The learning standards attached to each activity can be found at the following links:
 - i. <u>Missouri Learning Standards/Missouri Department of</u> <u>Elementary and Secondary Education (DESE)</u>

Handout A

THE WEEK IN WEATHER

Weather Log

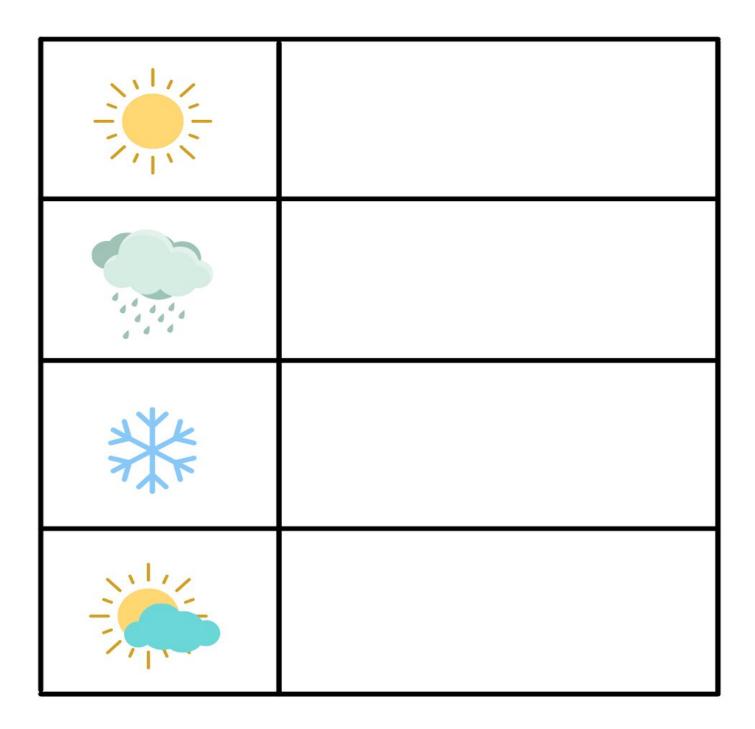
Observe the weather each day and record the data. Ask yourself: What color is the sky? What is the temperature? What kinds of clothes would I need to wear to go outside?



Handout B

COUNT THE WEATHER DAYS

Input how many of each weather type happened over the course of 1 week.



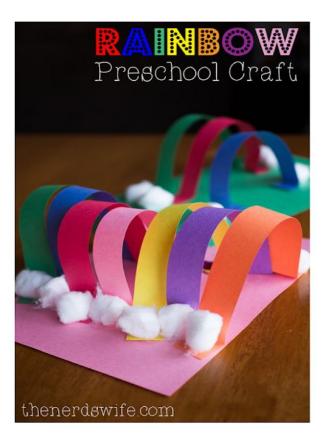
3D RANBOW CRAFT EXAMPLES



https://www.easypeasyandfun.co m/rainbow-paper-craft/



https://iheartcraftythings.com/rai nbow-card.html



https://thenerdswife.com/rainbo w-preschool-craft-elmers-earlylearners.html



https://www.craftymorning.com/ 3d-paper-rainbow-kids-craft/

WATER CYCLE IN A BAG

Supplies needed: Plastic sandwich or ziplock bag, markers, 1/4 cup water, and tape

 Lay your bag out flat on a hard surface. Draw a simplified water cycle and label the different parts (Condensation, Evaporation, Precipitation).

- Add 1/4 cup of water to your bag and zip it tightly closed.
 - 3. With your parent's permission, tape the bag to a window that gets lots of direct sunlight. (Tip: Use a heavier tape like painters or masking tape. Tape along the top and sides of the bag so it doesn't fall.)





Draw the Mississippi River. It flows along the eastern border.

Draw the Missouri River. It flows along the north western border and then across the state.

Talk about where the cities and rivers are. Are they close together? What part of the state do you live in?



Supplies needed: Large plastic bottle, scissors, tape, ruler, marker, and a small amount of water

- Using scissors, cut off the top part of your bottle.
 Set aside the top for now.
- 2. Pour about a half-inch of water into the bottom part of your bottle.
- 3. Put a long piece of tape going up the side of your bottle. Then take your ruler and make a mark at each inch starting at the point where the water is filled.

4. Remove the lid from the top part of your bottle and then turn the top upside down and place it into the bottom part of the bottle to create a funnel.