# Water Cycle





Grade Level: 3rd – 5th Grade

#### Approximate Length: 125 – 180 minutes

### **Objectives:**

- Learn the importance of the water cycle
- Understand that water quality plays a key role in survival for plants, animals and people
- Learn the positive impacts of wetlands and soil to filter water
- Understand the difference between surface water and ground water

## Science Standards Available (Teacher will identify which standards to bundle):

- 3-ESS3-1 Weather related hazard solutions
- 4-ESS2-1 Weathering and erosion
- 4-ESS3-1 Renewable and non-renewable resources
- 5-LS1-1 Plant requirements (air and water)
- 5-LS2-1 Environmental matter cycling
- 5-ESS2-2 Water availability and distribution
- 5-ESS3-1 Protecting Earth resources and environment

## **Outline for Program:**

- <u>Interest Approach (5-10 min)</u>: Students will start the lesson by talking in their small groups about their favorite activities to do with water. Then they will make a list or chart and write down their water activities based on when they occur in different seasons. Together as a whole group, we will share our answers to see which activities and seasons are most popular.
- <u>Opening Activity (15-20 min)</u>: During this time, students start off by making their own list of five or more facts they know about water and three questions they are wondering about water. Then they will discuss among their small groups and decide on a speaker to present to the room. When the groups are all done, we will go over the facts and questions as a large group and discuss how important the water cycle is to everyone.
- <u>Presentation (45-60 min)</u>: The students will learn about the importance of the water cycle and how it affects us all. Students will watch a video and then fill out a note guide for the steps in the water cycle. Together we will explore how we play a role in the water quality on Earth, based on what happens throughout the cycle. Student will get to see how they can create their own clouds in a water bottle and how they can create their own precipitation too. Ultimately, students will learn how to their choices can affect the surface water and ground water around them, while also impacting lives from her to the ocean.
- <u>IQhub Scavenger Hunt (45-60 min)</u>: The IQhub is an interactive museum, that will help the students build on topics they have already learned and grab their attention for some new ones as well. Students can work individually or in small groups to explore the IQhub and learn about agriculture and the environment. This museum incorporates Science, Technology, Engineering and Math (STEM) to give students a well-rounded and fun learning experience.
- <u>Closing Activity (15-30 min)</u>: Since water plays a key role in keeping living things healthy, it's important to understand how a healthy environment is directly related to water quality. Students will get a chance to stretch their legs and see some easy ways to help increase water quality, through wetland environments. Erosion, filtration and environmentally friendly buildings are other topics discussed during this activity.

#### Additional Resources on YouTube:

https://www.youtube.com/watch?v=2aectu\_oWM8