Galena Creek Visitor Center At-Home Learning Activity Lesson Plan

Water Cycle in a Jar

via Science Fun



This is a great activity for kids to visualize the stages of the water cycle. This activity can easily be done indoors and only involves a jar with a lid, hot water, and ice cubes. This is a good activity for grades 4-8 and involves little parental involvement. Through this project, kids learn science subjects like chemistry and biology.

Objective: The objective of this project is to visualize the process of the water cycle so kids can learn how the stages occur. At the end of this activity, kids will have a water cycle in a jar and explain how water becomes ice and vapor.

Discipline or Subject Covered: This project teaches kids science subjects like biology and chemistry.

Grade Level: This project works best for kids in grades 4-8 who have learned about the water cycle.

Materials:

- Glass jar with lid
- Hot water
- Ice cubes

Procedure:

- 1. Fill the jar halfway with hot water (the hotter the better).
- 2. Put the lid on the jar and put ice cubes on top of the lid.
- 3. Watch while the water in the jar evaporates toward the top of the jar and then condenses back into rain.
- Tip: Add blue food coloring to the water in the jar so the state changes are more obvious.

Discussion:

Discussion Questions:

- Why do you think the water vapor rises to the top of the jar?
- What are the different phases that water takes and how do they move between these phases?
- Try with a larger jar or change the number of ice cubes or the amount of water and compare the time it takes for the state changes to stop.
- Can you describe how this cycle works in real life?

How does it work?

Water moves between it's three phases, liquid water, ice, and water vapor, based on temperature. The hot liquid water evaporates into water vapor, and rises to the top of the jar. There, it hits the cold from the ice and turns back into water, melting down the jar like rain.

Other Resources/Further Information:

Check out this USGS water cycle resource for more information.

Watch this Water Cycle video from the National Science Foundation.

Spend some time on this Water Cycle coloring sheet.







