

Watch the Water Cycle Happen in a Bag!

September 28, 2024 / DIY / STEM Activities / Quick Easy Experiments / Age 6 - 8 / Water Cycle Bag



Have you ever wondered where water comes from? Do you know why it rains? How are clouds formed? Download our water cycle template, and let's learn about the water cycle on Earth together.

- Age: 6-8
- Time: Less than 30 minutes
- Level: A little Messy
- Adult Supervision Required

Materials Needed:

- Water cycle template
- Resealable Bag
- Marker Pens
- Water Cup
- Food Colouring (Blue)
- Tape



Step-by-Step Instructions:

1. Using marker pens, trace the water cycle pattern onto the resealable bag.



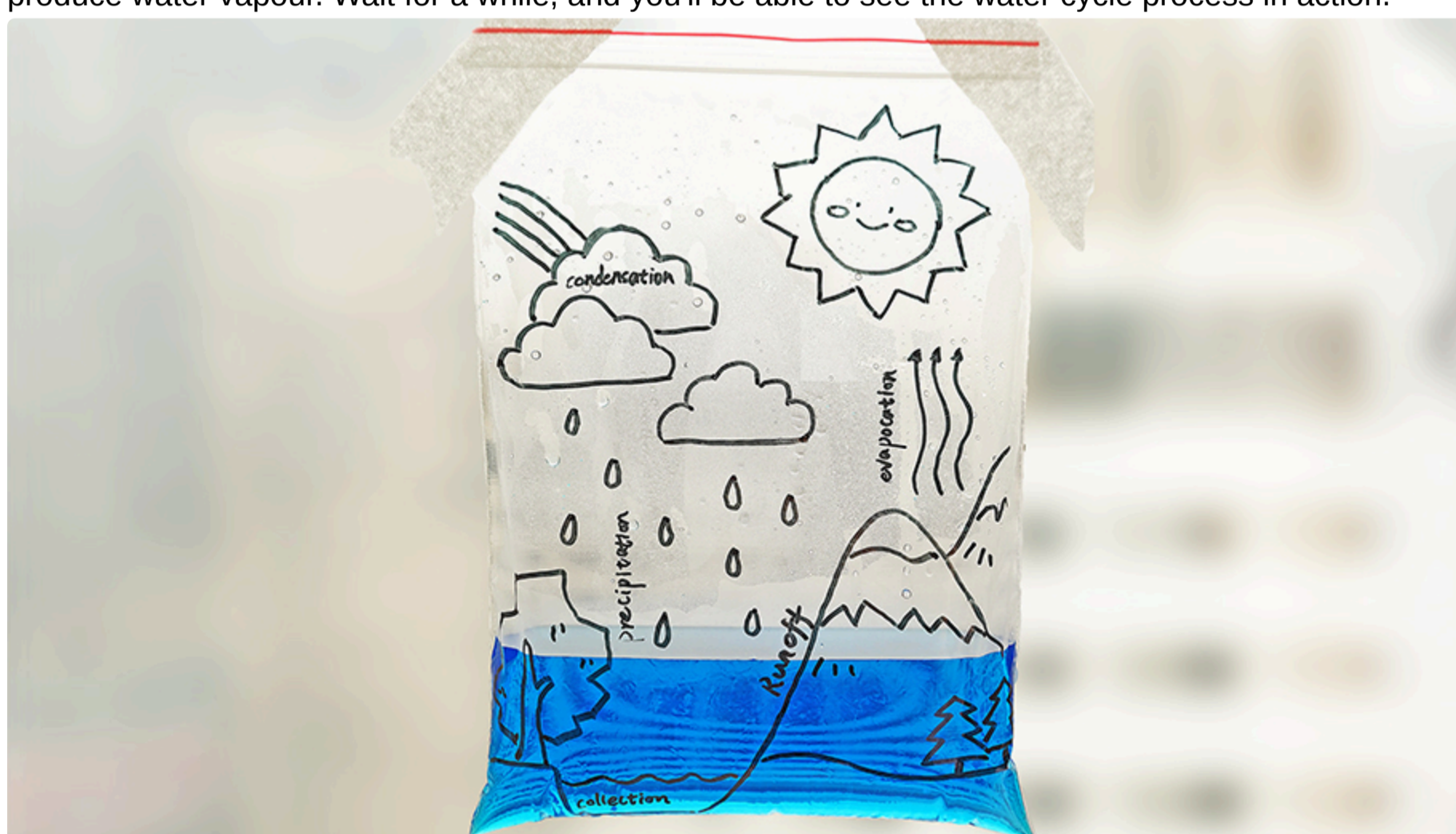
2. Add blue food colouring to the water and mix well. Blue is used to simulate the visual effect of seawater, which makes observation easier.



3. Pour the coloured water into the resealable bag and seal it well.



4. Use tape to attach the sealed bag to a window that receives sunlight. The aim is to heat the water to produce water vapour. Wait for a while, and you'll be able to see the water cycle process in action.



Tip:

If there's no sunlight or if the weather is too cold, don't worry. You can use warm water or slightly heat the water in step 2 (but not too hot). Then pour the water into the resealable bag, and this will also create water vapour. Using sunlight, however, will be closer to the natural water cycle process.

5. You can also download our other water cycle template and colour it in, then draw some water droplets on a transparent card. Pin them together with a drawing pin, and you can simulate the water cycle process this way too.



The Science Behind It:

Water heats up and produces water vapour (evaporation), small water droplets condense on the bag (condensation), and then flow back down into the water (precipitation). This is a complete water cycle process. On Earth, the water cycle is influenced by various factors such as temperature, atmospheric pressure, and ocean temperature. You can try making changes to your bag, for example, make two water cycle bags, one with cold water and another with warm water, and see what differences you notice.

