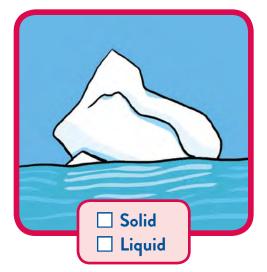
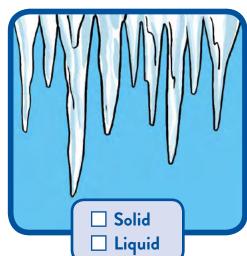
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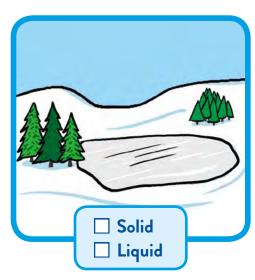
Water Cycle

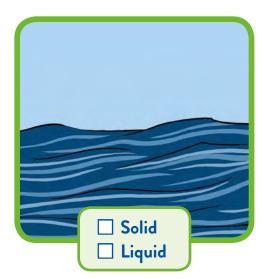
Over 70% of Earth's surface is covered in water. Water is the only thing that can naturally be found on Earth as a solid, a liquid, and a gas.

Write a next to the correct form of water.













Animals live in the water—both solid and liquid—all over Earth.

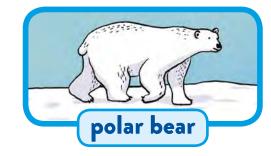
Draw a line to connect each animal to its water habitat.













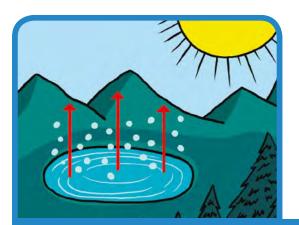


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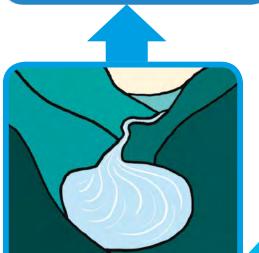
The water cycle describes the way water moves to and from the land, sky, and ocean. Water that starts on the land becomes a gas in the sky, and then becomes a solid or liquid that falls back to Earth. The water cycle repeats over and over again.

Look at the water cycle, and read the descriptions aloud. Then answer each question.



### Evaporation

Water from rivers, lakes, streams, and oceans changes to water vapor when the sun heats Earth.



#### Collection

Liquid water collects in rivers, lakes, streams, and oceans.



#### Condensation

Water vapor in the air changes into small drops of liquid water when it gets colder. The small water drops come together to make clouds.



### Precipitation

Water falls to Earth from clouds full of water. Precipitation can be rain, hail, or snow. When you breathe on a cold day and you can see your breath.



Is this water vapor a **liquid** or a **gas?** 

When clouds become heavy with water and raindrops fall to Earth.



Are these drops precipitation or evaporation?

When you leave a bucket of water outside for a few days and you find less water in the bucket.



Is the water evaporating or precipitating?

When you add ice to a glass of water and water drops form on the outside as it cools.



Are these drops condensation or evaporation?

Which parts of the water cycle have you seen for yourself?

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All forms of water can be seen in the weather as it falls to Earth. Research and record your weather for a week.



	Draw the weather outside your home.	Is there any precipitation?	Is it a solid, liquid, or gas?
		☐ Yes	
Sunday		□ N₀	
Monday		☐ Yes	
		□ N₀	
Tuesday		☐ Yes	
		□ N₀	
Wednesday		☐ Yes	
		□ No	
Thursday		☐ Yes	
		□ N₀	
Friday		☐ Yes	
		□ N₀	
Saturday		☐ Yes	
		□ N₀	

Severe weather events often have precipitation. Read each definition. Then draw a line to the matching picture.

In a **hailstorm**, balls and lumps of ice, called hail, fall like rain.



In a **thunderstorm**, heavy rain falls. There is thunder, lightning, and sometimes wind or hail.



A **hurricane** is a storm that forms over the ocean. Fast-spinning winds pick up water, move at over 74 miles per hour, and make heavy rain.



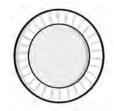
A **blizzard** is a cold-weather storm with strong winds. Snow is blown so quickly that seeing is difficult.



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# LET'S START! GATHER THESE TOOLS AND MATERIALS.







Paper plate

Permanent markers

2 or more plastic sandwich bags

Water







Ice cubes



Water bottle

Aluminum foil



Place some of your materials in the bowl of water. Watch what happens when they get wet.

- How do they change?
- Do any of them stay the same?
- How do they move in the water?
- What else do you notice?

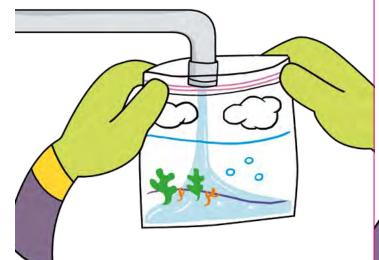


# LET'S MAKE: YOUR OWN WATER CYCLE

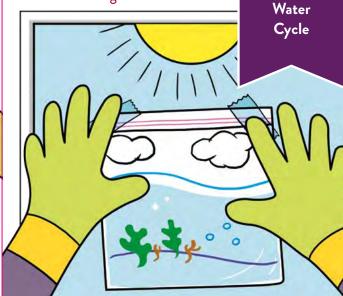
**1.** Using a permanent marker, draw an ocean at the bottom of a plastic bag and clouds at the top.



2. Fill your bag with about 1 inch of water and seal the top tightly.



3. Tape the bag to a window with lots of sunlight.



**4. Watch** the water inside your bag "cycle" over several days! Can you tell when the water evaporates, condenses, and precipitates?

## LET'S ENGINEER!

Dimitri wants to put ice cubes in his water bottle, but the ice cubes he has won't fit through the neck of the bottle.

How can he freeze more water so the cubes fit into the bottle?

**Design** a new ice cube shape that can fit into the bottle. What shapes can solve the problem?

Make a mold with your foil, pour in water, and put it in your freezer. After a few hours, remove your new ice cube. Does it fit into a water bottle?



Get your sticker!



## TINKER





## MAKE

# ENGINEER



The NEW way to

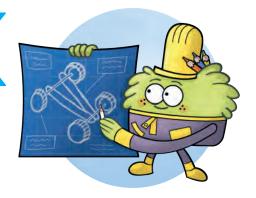
LEARN THROUGH PLAY!



## Discover a New Way to Learn Through Play with TinkerActive!

## DEAR READER,

At the TinkerActive workshop, our mission is to inspire a generation of fearless **learners**, **makers**, and **problem solvers**. We all know that kids have to learn the ABCs and 123s. But the future belongs to the children who learn to think beyond the basics.



So we designed **TINKERACTIVE WORKBOOKS** to do both: build children's foundational knowledge *and* encourage them to try new things, discover new skills, and imagine new possibilities. That's what "Tinker, Make, and Engineer" means to us, and we believe that it can lead to lifelong learners who create a better world.









#### SO HOW DO WE DO IT?

Each chapter includes **curriculum-based activities** as well as tinkering, making, and engineering projects, where kids can actually use the concepts they just learned to solve problems hands-on.

Every TinkerActive Workbook has been created in consultation with an **award-winning teacher** to ensure that we cover the core competencies and align with Common Core State Standards and Next Generation Science Standards.

We also include achievement stickers for each project, and a secret magnetic merit badge so kids can celebrate their accomplishments!

Our goals are to cheer on your child, to ask, "Why do you think that?" and to help them explore all the possible answers. By supporting your child's innate curiosity, who knows what we might learn together!

Visit **TinkerActiveWorkbooks.com** to learn more about the workbook series and share your workbook fun with **#TinkerActive**.







# DISCOVER ALL THE TinkerActive!



Perfect for grades K-2, each TinkerActive workbook comes with 128 pages of interactive curriculumbased exercises and exciting hands-on projects that utilize common household materials and encourage children to learn through play.





