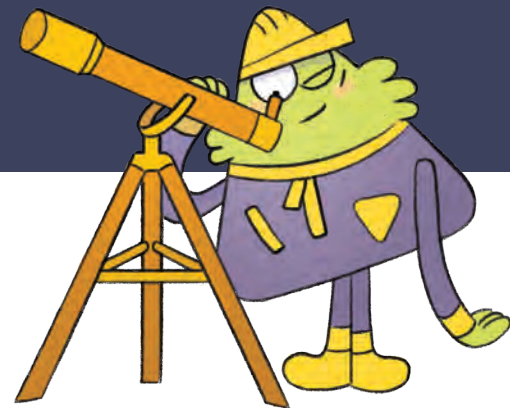


Earth is the planet we live on. It is made of rock and surrounded by air. There is land and water. Color the land **green**. Color the water **blue**.



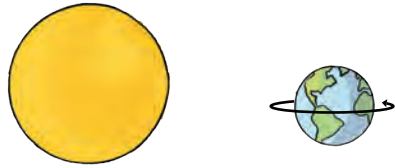
Water collects in oceans, lakes, rivers, and even waterfalls! What bodies of water do you see near your home or neighborhood?

Earth's surface has the air, water, and dirt that plants, animals, and people need to live. Circle the living things. Then draw yourself on Earth's surface.



Look around your home. What living things do you see?

Read the text aloud. Then circle the correct label for each picture.



Earth is always spinning. Some parts spin to face the Sun and some parts spin away. The part of Earth facing the Sun has light and it is daytime. The part of Earth facing away from the Sun has darkness and it is nighttime.



day

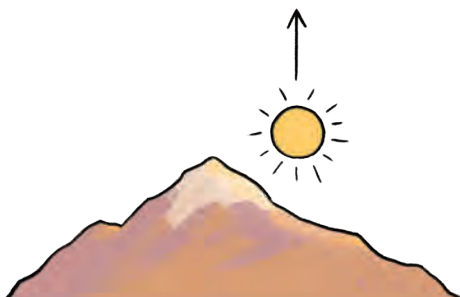
night



day

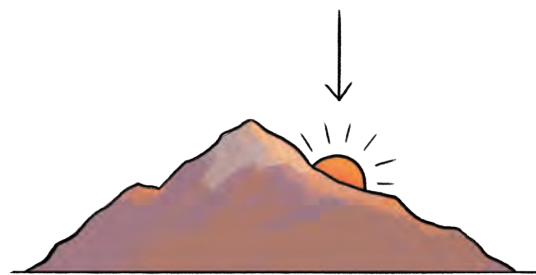
night

Each day the Sun appears to rise as Earth spins. During the day, we see it travel across the sky. Each night the Sun appears to set. Earth spins and we can no longer see the Sun until the next morning.



sunrise

sunset

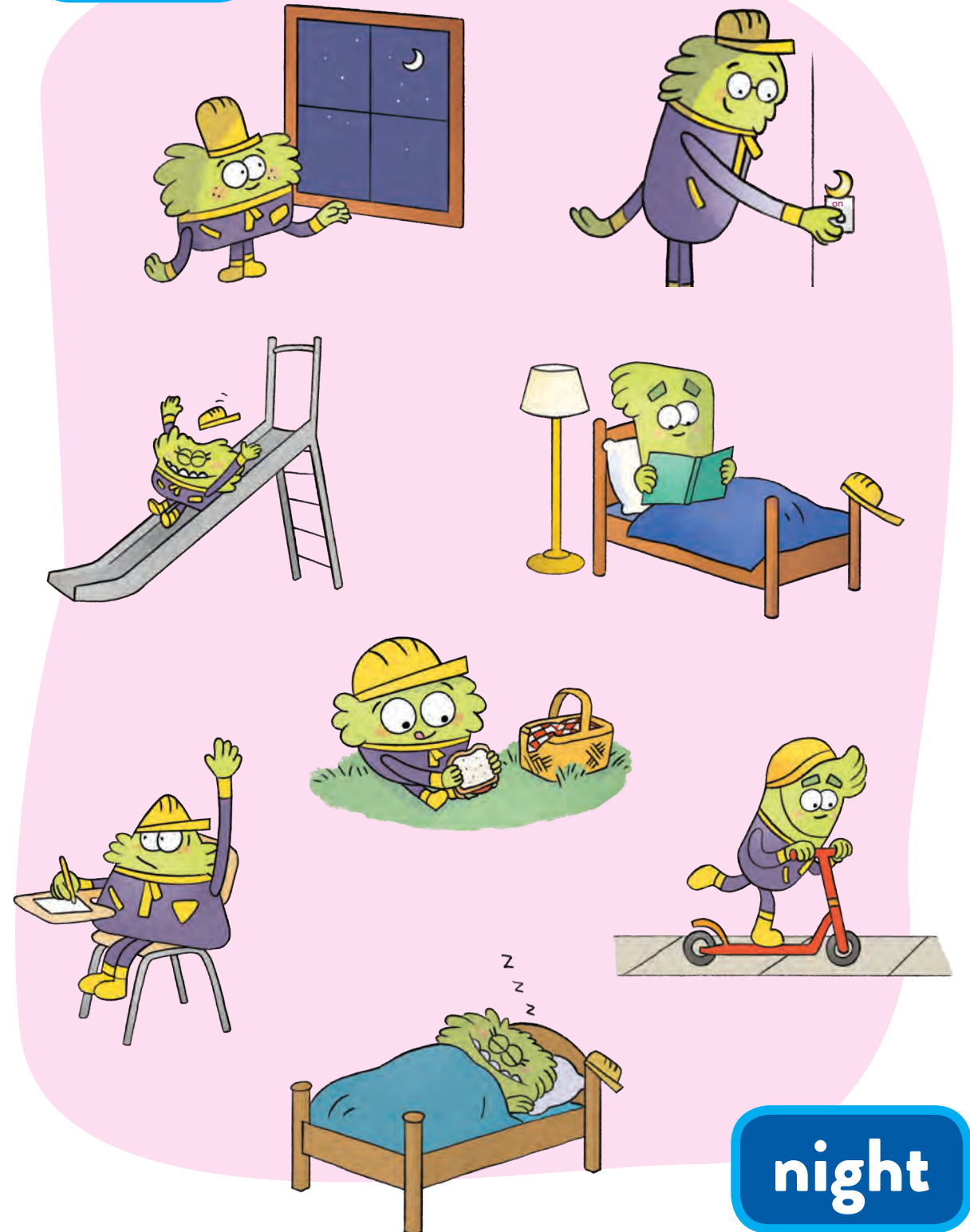


sunrise

sunset

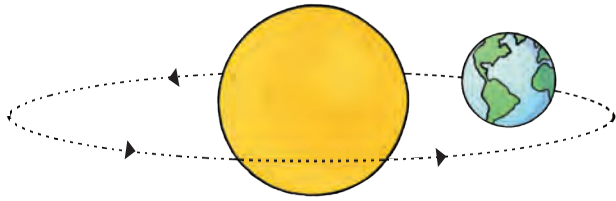
Draw lines to connect each activity to the time of day it usually occurs.

day



night

Earth travels around the Sun once per year. The path it moves on is called its orbit. The way the Sun's rays hit Earth as it orbits gives us seasons.



Direct, strong rays cause hotter temperatures in the summer, when days are longer.



Less direct, weaker rays cause colder temperatures in the winter, when days are shorter.



Different locations on Earth have their seasons at different times based on the tilt of Earth toward or away from the Sun. Seasons repeat at the same times every year. It takes 365 days for Earth to orbit the Sun one time.

Circle the correct words in each sentence.

In the summer, the days are **long** / **short**.

In the winter, the days are **long** / **short**.

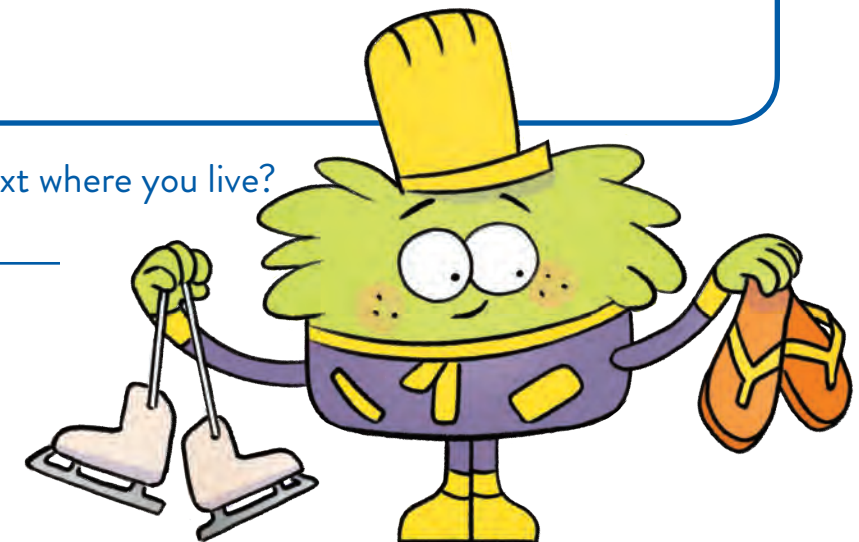
The seasons happen at **the same time** / **different times** every year.

Every year, the seasons repeat: summer, fall, winter, and spring.

Look out your window. What season is it now? Write about or draw how you know what season it is.

How do you dress for this season? Draw the clothes you wear.

What season is coming next where you live?



LET'S START!

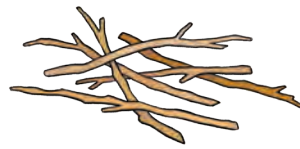
GATHER THESE TOOLS AND MATERIALS.



5 or more rocks



4-6 leaves



4-6 sticks



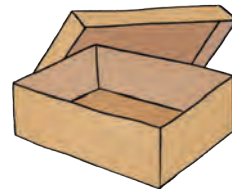
Trowel



Paper plate



4-6 toothpicks



Shoebox

LET'S TINKER!

There are many patterns on Earth, like day and night, sunrise and sunset, and the seasons.

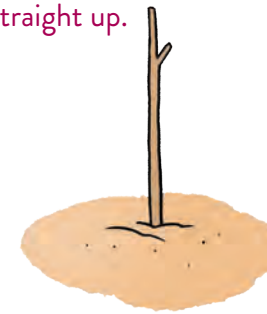
Create patterns with your materials. Which materials can you repeat? Can you make short patterns? Can you make long patterns?



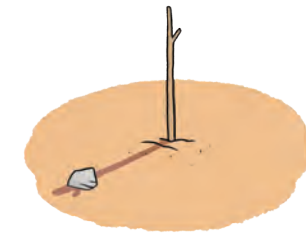
LET'S MAKE: SUNDIAL!

Earth is always spinning, so the Sun's rays hit it differently throughout the day. **Make** a sundial, which is a simple device for telling time by watching shadows move as Earth spins!

1. On a sunny day, **dig** a small hole in the dirt and **place** one end of a stick in the ground, pointing straight up.



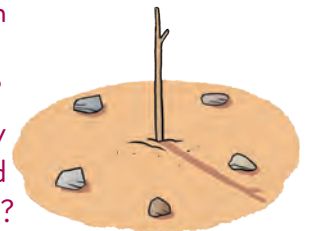
2. **Use** one of your objects, like a rock, to mark where the stick's shadow is on the ground.



3. **Predict** where you think the shadow will be in 10 minutes, 1 hour, much later in the day, and tomorrow morning. **Use** other objects to mark where you think the shadow will move to.



4. **Check** your sundial at different points in the day. Were your predictions correct? Did you observe any patterns? Where did the shadow move to?



1

Earth

LET'S ENGINEER!

Frank's class is getting an insect as a new pet! But it's a surprise—no one knows exactly what kind of insect it will be.

How can Frank provide his new pet with everything it needs to survive when he doesn't know what kind it is?

Set up a habitat with things an insect would need to survive. Use your shoebox as a home. Which materials can be used to make a shelter? Can any of your materials work as food? Where can you put the water?

Look for other materials around your home that can help.



PROJECT 1: DONE!
Get your sticker!

TinkerActive

WORKBOOKS

TINKER



MAKE



ENGINEER



The **NEW** way to
LEARN THROUGH PLAY!

TinkerActiveWorkbooks.com

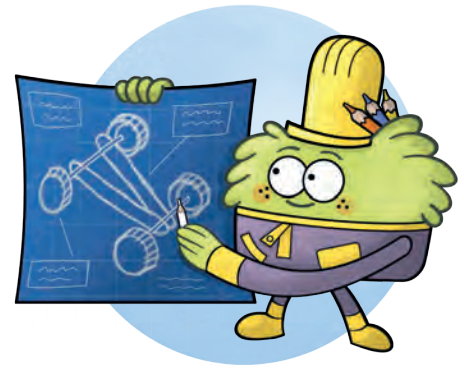


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CHILDREN'S PUBLISHING GROUP

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.

Tinker

TRY NEW THINGS

Make

DISCOVER NEW SKILLS

Engineer

IMAGINE NEW POSSIBILITIES



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**.



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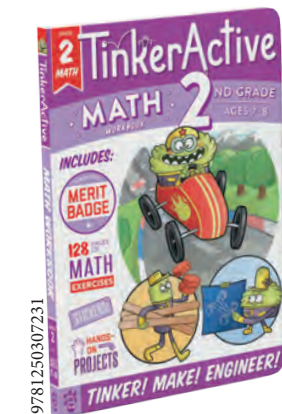
Yours in discovery,

THE TINKERACTIVE TEAM

DISCOVER ALL THE TinkerActive! WORKBOOKS



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



VISIT TINKERACTIVeworkbooks.com TO LEARN MORE.