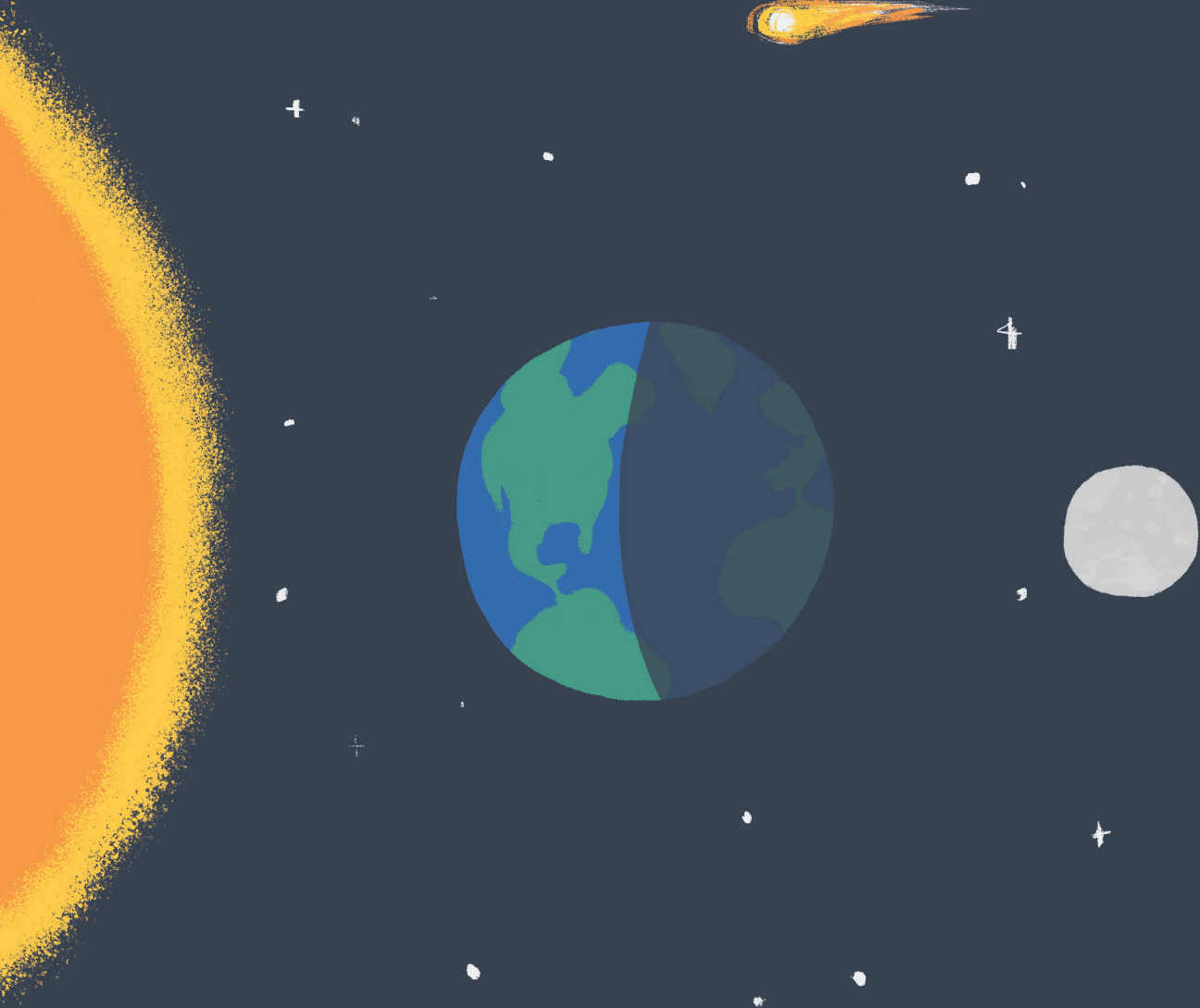


The Sun

Look at Earth. When one side is facing the Sun, it's daytime. That's when the air is warmed by the Sun. On the other side, away from the Sun, it's nighttime. That's when it's cooler. Circle the warm side with red. Circle the cool side with blue.



The Sun rises and sets at different times in different places throughout the year.

Around what time did the Sun rise near you this morning?
Were you awake?

Watch to see what time it sets tonight—if you are awake to see it!

Look what the Sun is melting! Draw what happens to each item in the hot Sun.



The Sun warms Earth.
How do you stay cool
when it's hot outside?

Read the story aloud.

Amelia, Brian, Callie, and Dimitri are going to the playground. It's a sunny day. Amelia enjoys taking a picnic lunch. Yum! Brian heads straight for the monkey bars. He likes to climb and swing. Wheeeee! Callie jumps into her favorite place to dig. Scoop! Dimitri wants to go down the slide, but it is too hot. Ouch!



Amelia



Brian

Help the MotMots cool off:

- Draw an umbrella to shade Amelia's picnic.
- Draw a hat to cover Brian on the monkey bars.
- Draw a giant tent over the sandbox for Callie.
- Draw a tree to shade the slide for Dimitri.



Callie

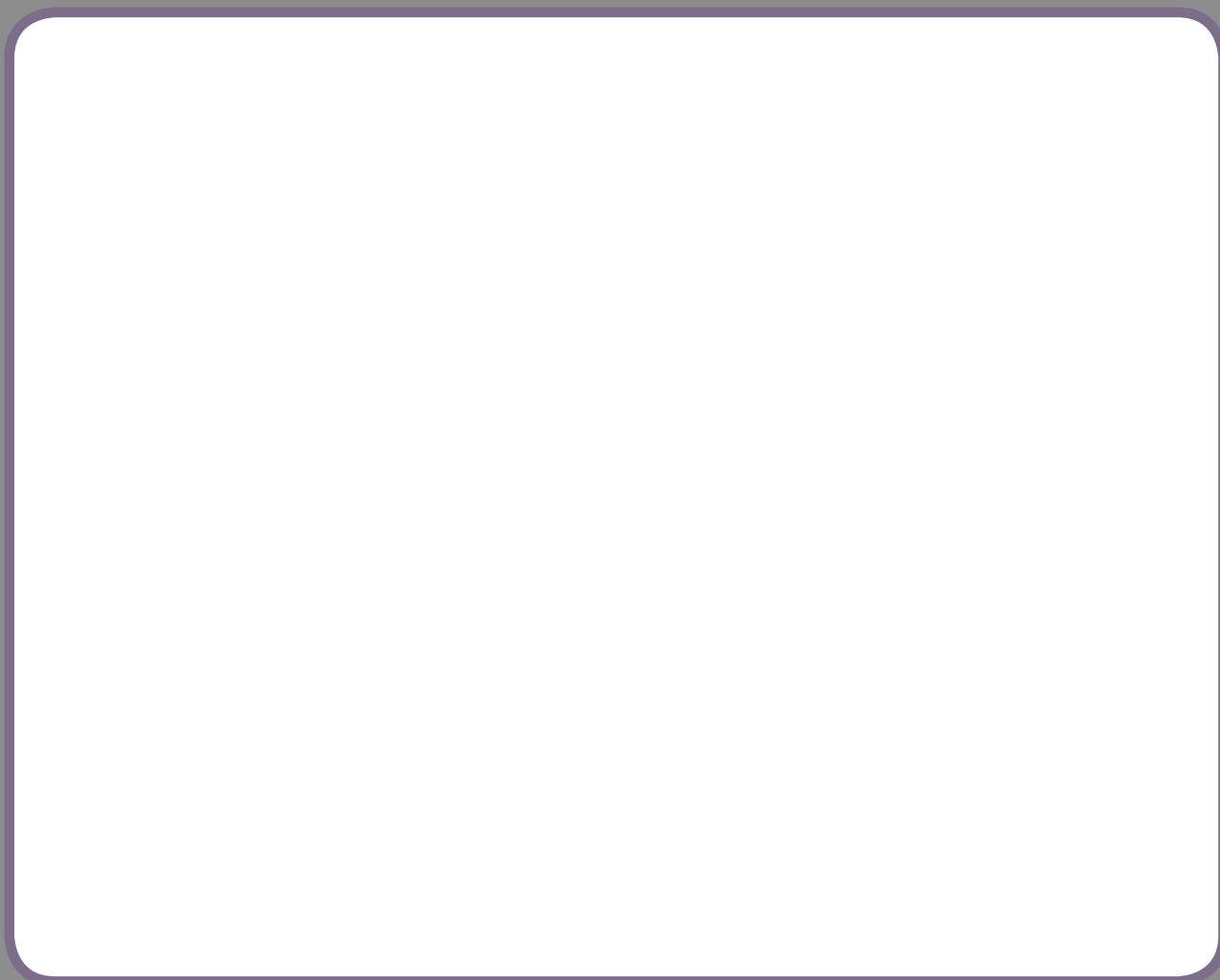


Dimitri

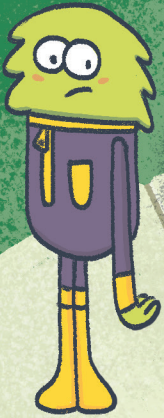
When the Sun hits an object, the object makes a shadow on the ground. Where the Sun no longer reaches the ground, it's cooler. Draw the missing shadows.



Go outside in the Sun and make your own shadow on the ground.
Draw your shadow here.

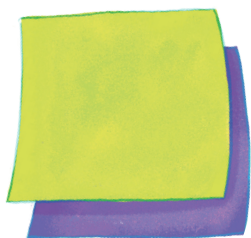


It's a blazing hot day, and Dimitri needs to buy a hat!
Draw a line on the sidewalk to take him to the hat
shop while staying in the shade.

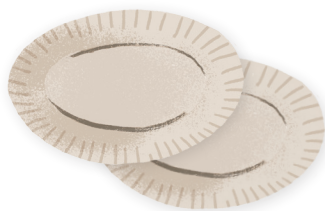


LET'S START!

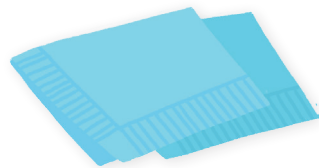
GATHER THESE TOOLS AND MATERIALS.



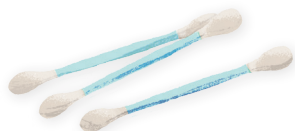
Construction paper



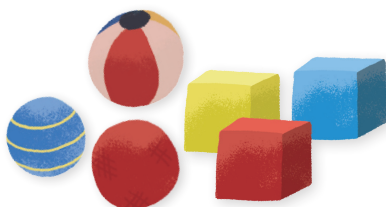
Paper plates



Napkins



10 or more cotton swabs



Toys



Crayons



Tape

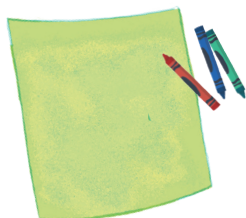
LET'S TINKER!

Use sunlight or a light to make shadows with your body and your materials. What happens when you move closer to a light? What about farther away from it? Can you make shadows on the floor or on the wall?

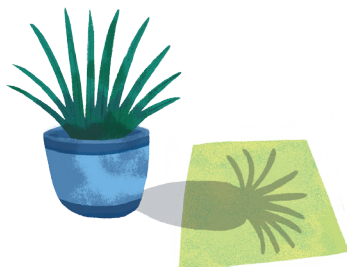


LET'S MAKE: SHADOW ART!

1. Lay a piece of paper flat.



2. Make a shadow on the paper with your body or with another object.

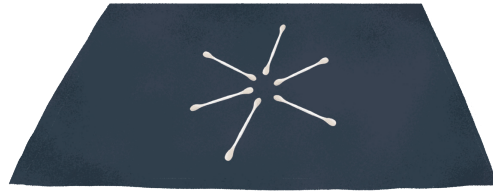


3. Trace the shadow with crayons and color it in to make shadow art.



You can also make a reverse shadow!

1. **Lay** an object (like a toy or a cotton swab) on a piece of dark construction paper.
2. **Place** the paper and object outside, in the bright sun.
3. After a few hours, **pick** up the object. What do you see on the paper?



LET'S ENGINEER!

Brian is throwing the world's smallest ice-cream party for his good friends the ants, but the weather is predicted to be sunny and hot.

How can Brian keep the ice cream cool so it doesn't melt as fast?

Make a structure that can shade ice cream. Which materials can help block the Sun? Which materials can hold the structure in place?



PROJECT 5: DONE!
Get your sticker!