

Parts of a Plant

Plants have different parts that help them live and grow.

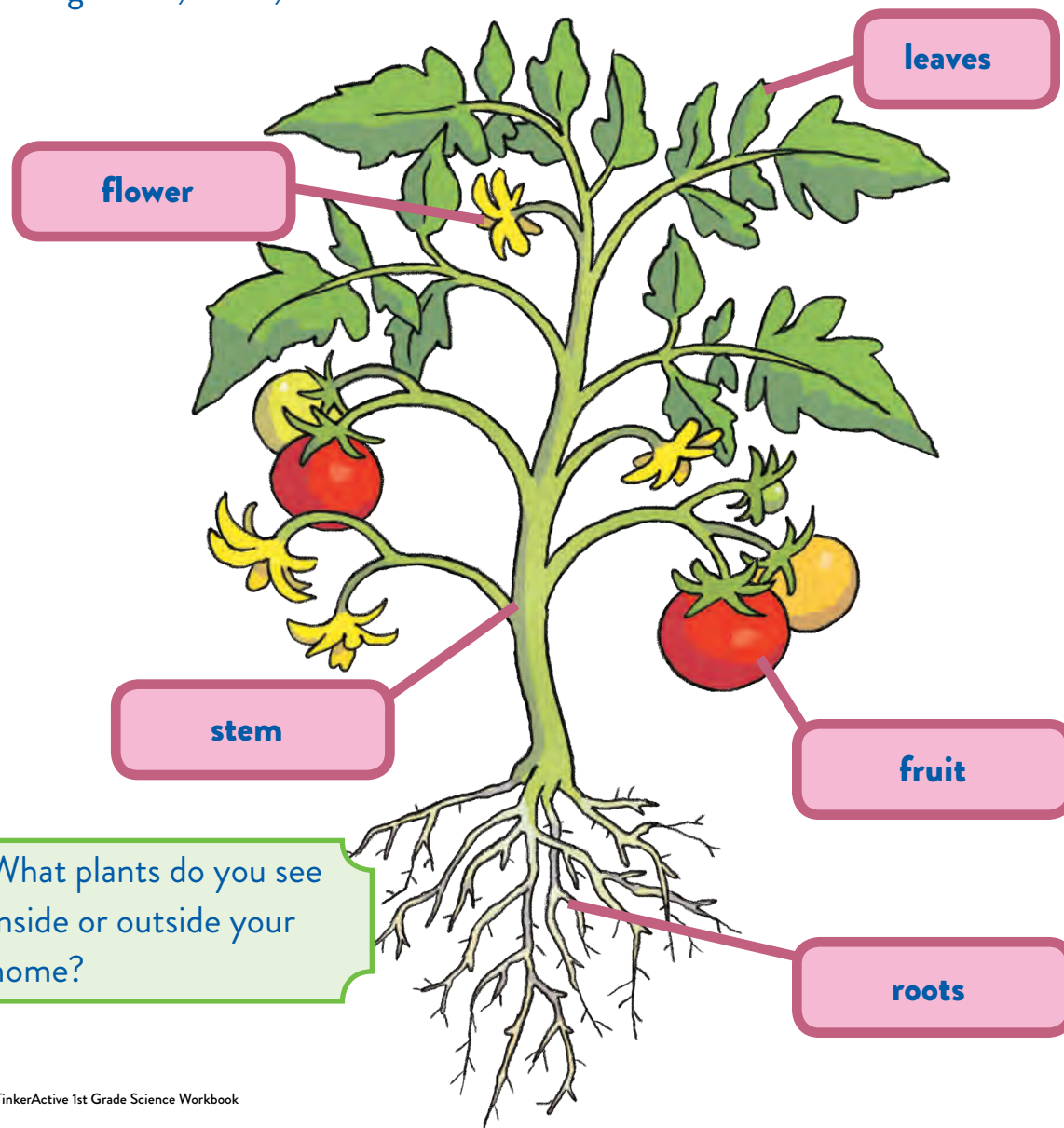
Roots collect water and nutrients, and they hold the plant firmly in the ground.

A **stem** or **trunk** holds the plant or tree up and transports water and nutrients to the leaves, flowers, and fruits.

Leaves collect sunlight and make food for the plant. They also make oxygen.

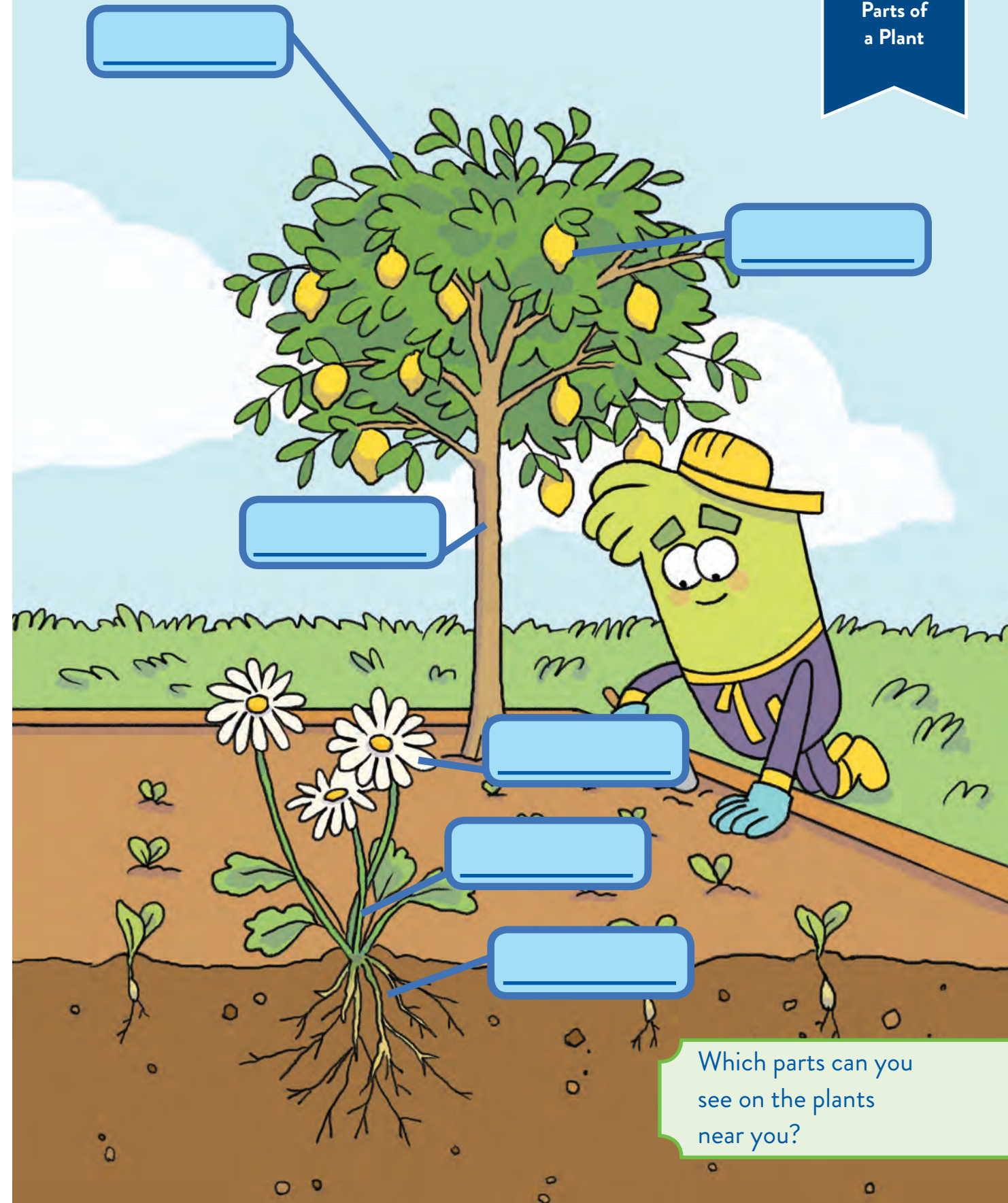
Flowers grow seeds for the plant.

Fruits provide protection for the seeds. They also help spread the seeds through wind, water, or animals.



What plants do you see inside or outside your home?

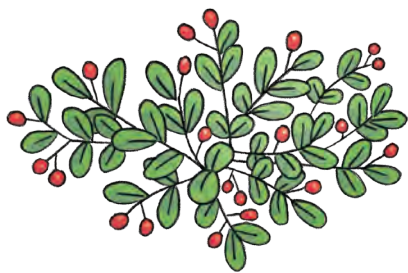
Label the parts of the plants in Brian's garden.



Which parts can you see on the plants near you?

Plants use their different parts to help them live and grow in different habitats.

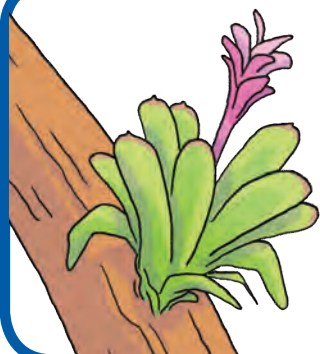
Connect each plant to its habitat.



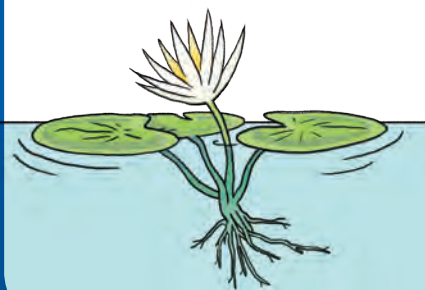
Bearberry plants have dark leaves and low stems. This helps them absorb heat from the Sun and from Earth so they can survive in very cold temperatures.



Agave leaves have a waxy coating to protect the water inside the plant. This helps them survive in hot habitats with little rainfall.



Bromeliads grow on other plants instead of in the ground. This helps them get closer to the Sun when the plants around them are tall.

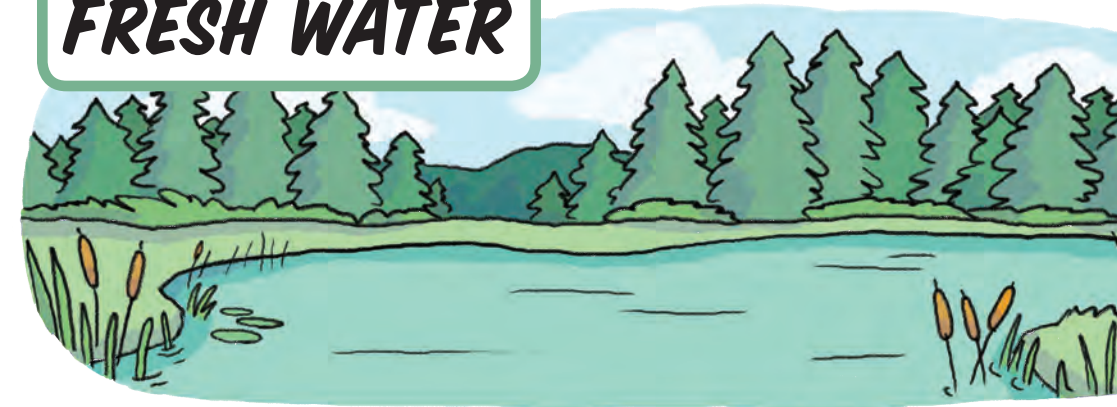


Water lilies have stems and leaves that can bend and move. This helps them live in underwater habitats.

RAIN FOREST



FRESH WATER



DESERT

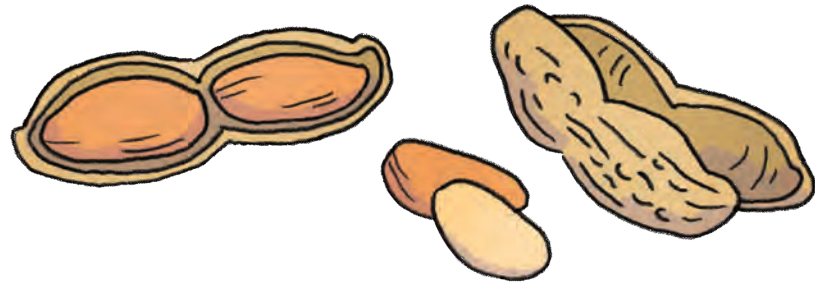


TUNDRA

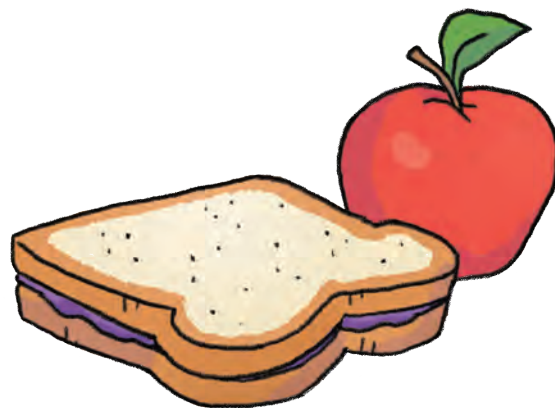


Look at how each plant uses its parts to live and grow. Then design your own solution to each problem.

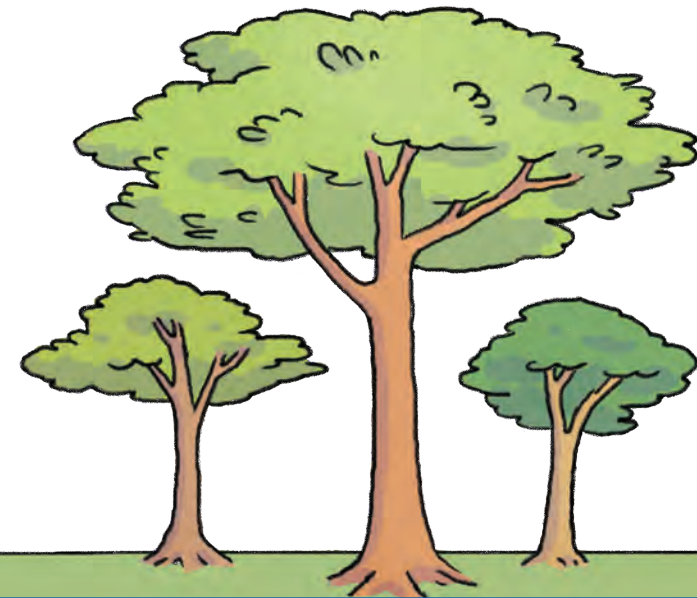
A peanut shell protects the seeds inside.



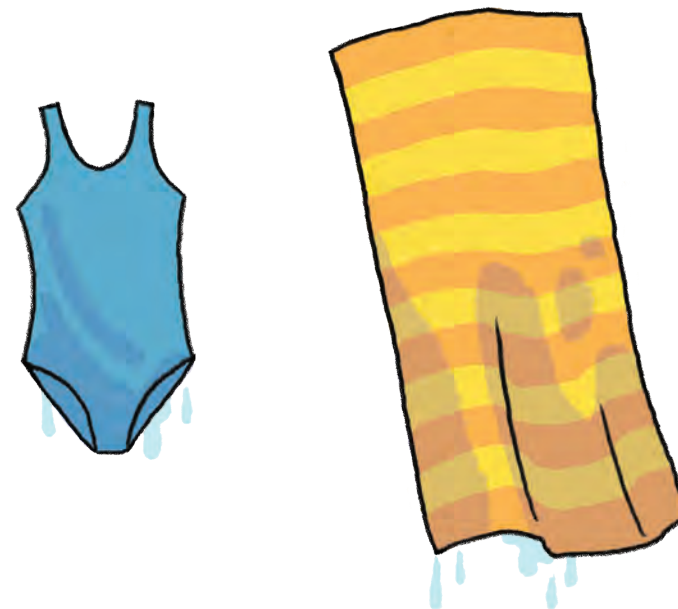
Write about and draw a solution you can use to protect your lunch on the way to school.



A tree's branches hold the leaves up high to get light from the Sun.



Write about and draw a solution you can use to hold a wet swimsuit and towel up to the Sun to dry.

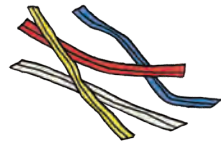


LET'S START!

GATHER THESE TOOLS AND MATERIALS.



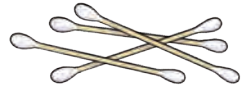
Tape or glue



4–6 twist ties



Aluminum foil



4–6 cotton swabs



Paper towel tube



1 paper towel



4–6 paper cups



Spoon



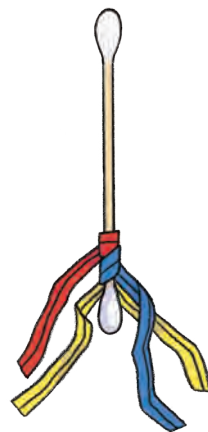
Scissors
(with an adult's help)



Markers

LET'S TINKER!

Play with your materials to create pictures or sculptures of plant parts. Can you **make** seeds, fruits, leaves, flowers, roots, and a stem or trunk?



LET'S MAKE: RAINBOW ROOTS!

1. Fill a cup halfway with water.



2. Take a paper towel and **cut** off a narrow strip.



3. Draw a rainbow on the paper towel strip with markers.



4. Fold the paper towel strip in half and **place** it over a spoon balanced on top of the cup. The ends of the paper towel should dip into the water.



5. Watch what happens. How does the paper towel change? Feel the paper towel—what do you notice? What happens to the water in the cup?



LET'S ENGINEER!

Dimitri is constructing a toy castle and he wants to add a tower. But Dimitri's tower keeps falling over! He knows that the stem and trunk hold a plant up, and the roots hold it firmly in the ground.

How can he build a tower that won't fall over?

Design a tower that stands strong and tall, just like some plants do. Which materials can help you build it taller? Which can help you build it stronger?

Try putting your tower on a table and then shaking the table. Is your tower still standing? If not, build it stronger.



PROJECT 4: DONE!
Get your sticker!

TinkerActive

WORKBOOKS

TINKER



MAKE



ENGINEER



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

TinkerActiveWorkbooks.com

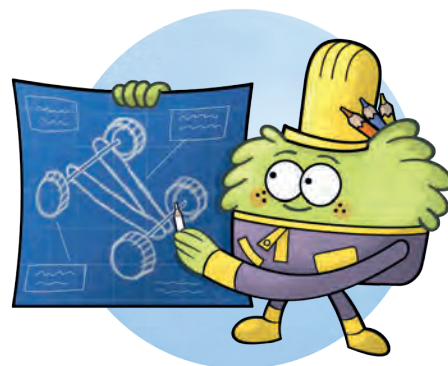


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Discover a New Way to Learn Through Play with TinkerActive!

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**.



CLOSE-UP OF MERIT BADGE



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**.



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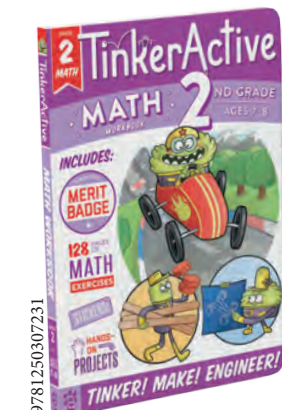
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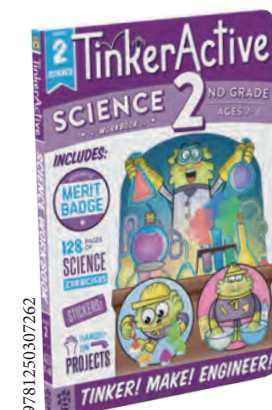
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