

# Parts of a Plant

Plants have different parts that help them live and grow.

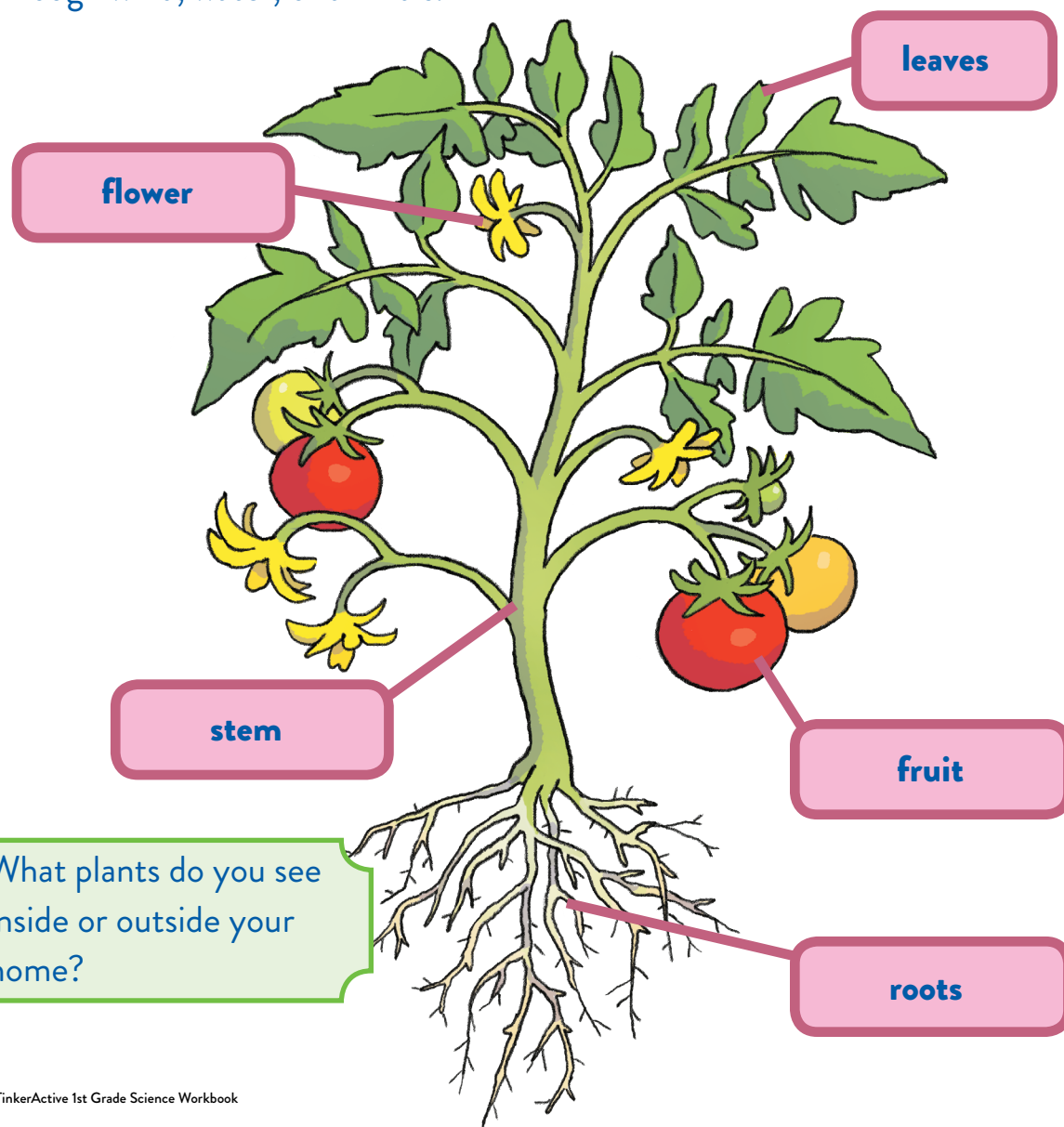
**Roots** collect water and nutrients, and they hold the plant firmly in the ground.

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.

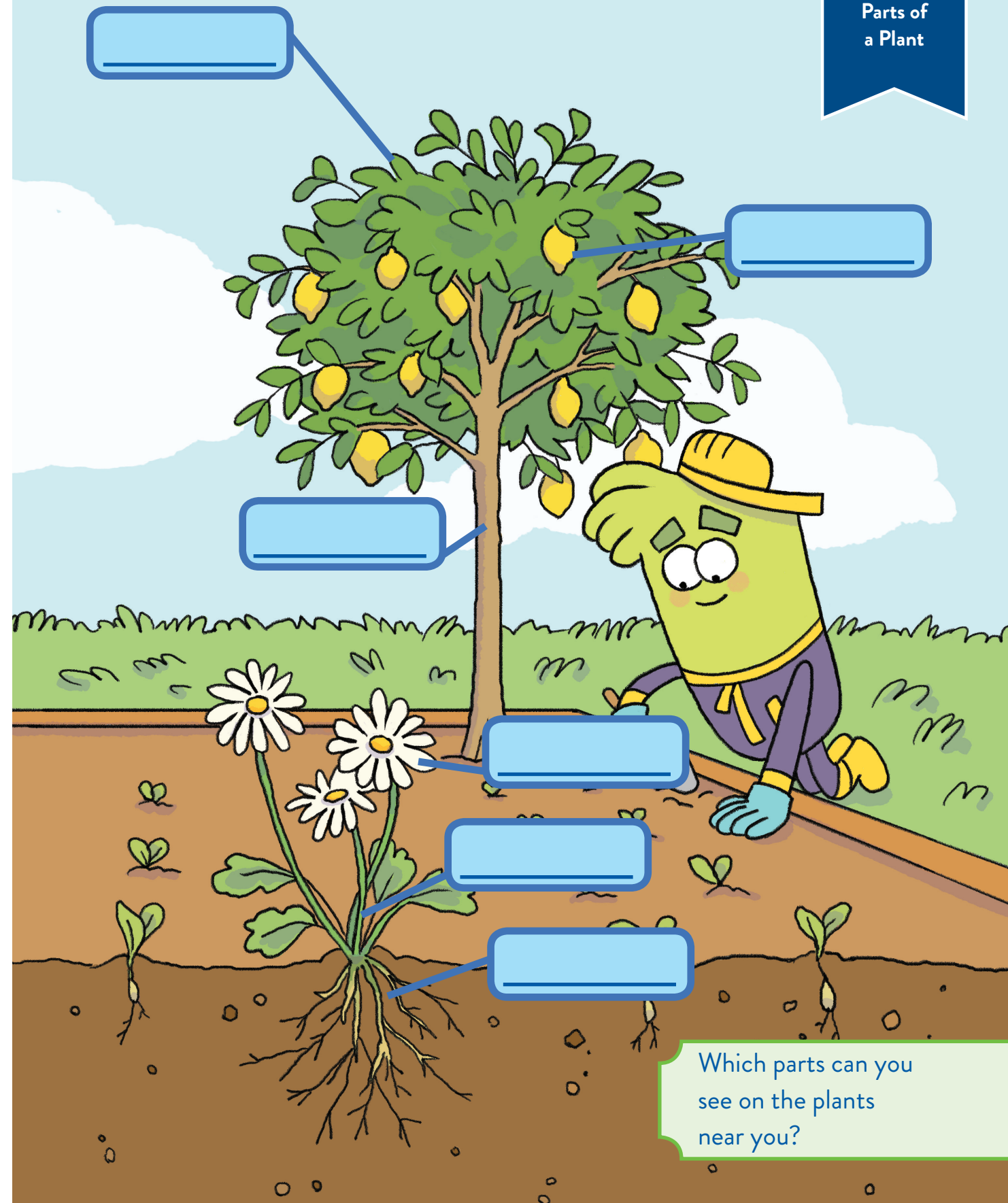
**Flowers** grow seeds for the plant.

**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.



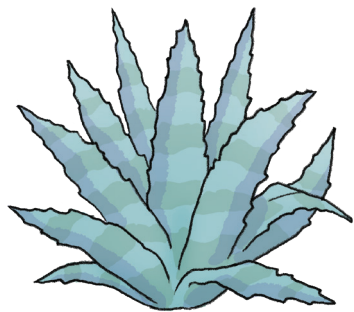
Which parts can you see on the plants near you?

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

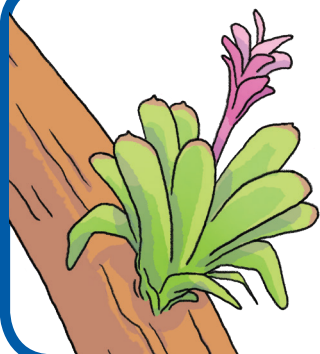
Connect each plant to its habitat.



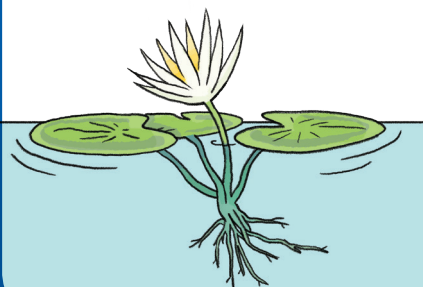
**Bearberry** plants have dark leaves and low stems. This helps them absorb heat from the Sun and from Earth so they can survive in very cold temperatures.



**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.

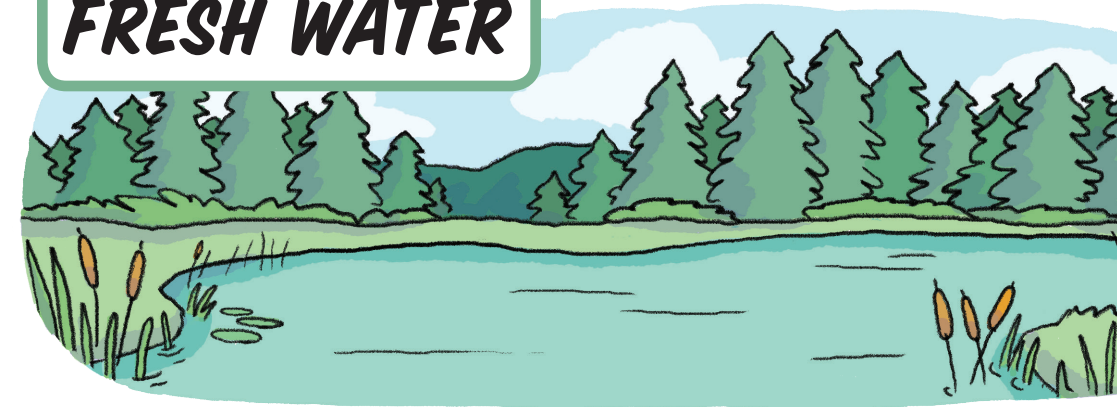


**Water lilies** have stems and leaves that can bend and move. This helps them live in underwater habitats.

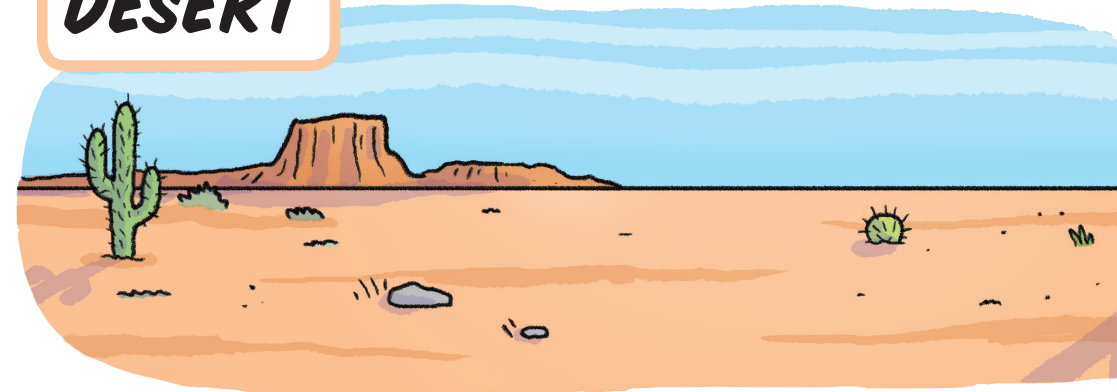
## RAIN FOREST



## FRESH WATER



## DESERT



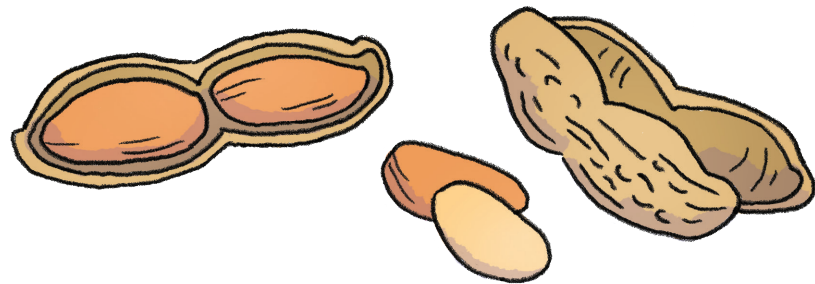
## TUNDRA



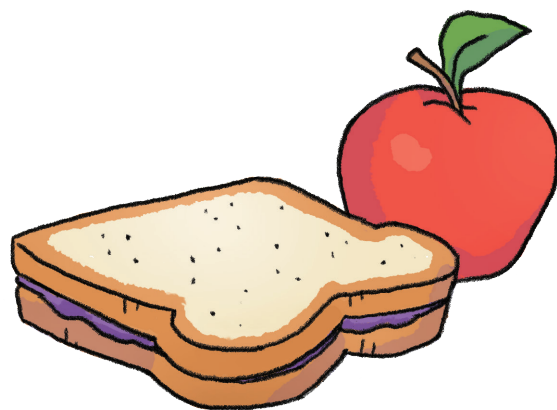


Look at how each plant uses its parts to live and grow. Then design your own solution to each problem.

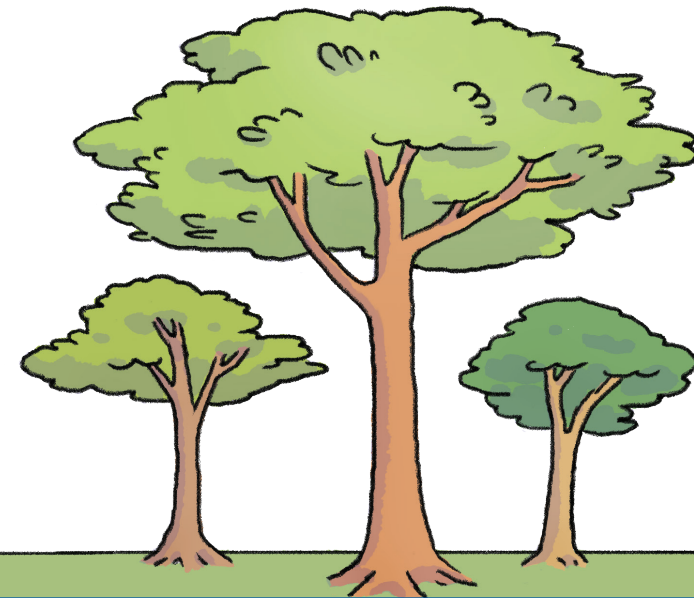
A peanut shell protects the seeds inside.



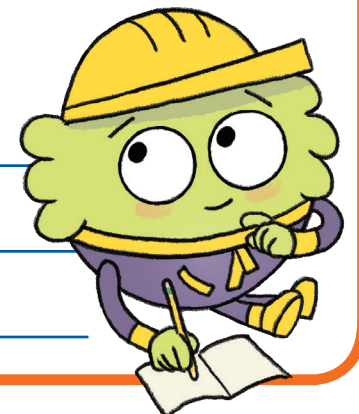
Write about and draw a solution you can use to protect your lunch on the way to school.



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

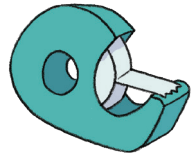


Write about and draw a solution you can use to hold a wet swimsuit and towel up to the Sun to dry.

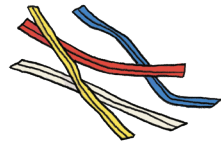


# LET'S START!

GATHER THESE TOOLS AND MATERIALS.



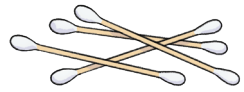
Tape or glue



4–6 twist ties



Aluminum foil



4–6 cotton swabs



Paper towel tube



1 paper towel



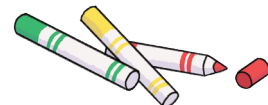
4–6 paper cups



Spoon



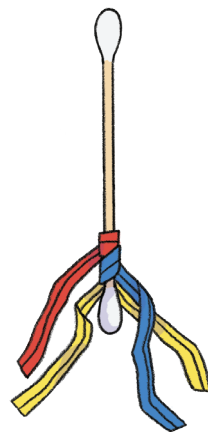
Scissors  
(with an adult's help)



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?

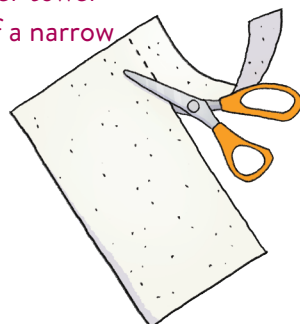


## LET'S MAKE: RAINBOW ROOTS!

**1. Fill** a cup halfway with water.



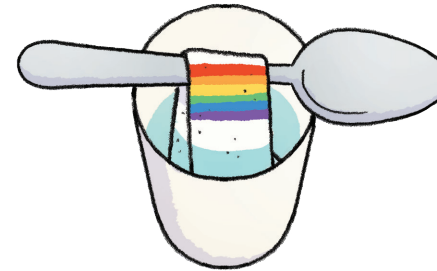
**2. Take** a paper towel and **cut** off a narrow strip.



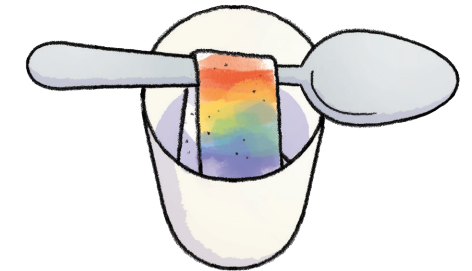
**3. Draw** a rainbow on the paper towel strip with markers.



**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?



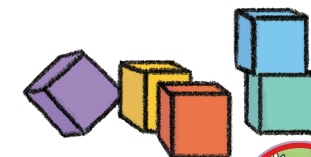
## LET'S ENGINEER!

*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!