LET'S

LEARN ABO<u>U1</u>

Every Thursday, the MotMots have a stacking competition. Measure each stack of MotMots in inches or in centimeters.





MotMots love to measure, so they have lots of measuring devices. Circle the best tool to measure each object.





Estimate the length of your own arm and then measure it. How close was the actual measurement to your guess?

Put your hand on the page and trace around it. Then use a ruler to measure each finger in inches and in centimeters. Write your measurements next to each finger. Then measure the length of your whole hand in inches and in centimeters and write your measurements below.





Put your foot on the page and trace around it. Then measure the length of your foot in inches and in centimeters. Write your measurements below.



# LET'S START!

#### GATHER THESE TOOLS AND MATERIALS.

5 bottle caps	Tape measure	Scissors (with an adult's help)	Rubber band
2 beads or pieces of dried tube pasta	Таре	Ruler	Markers

### LET'S TINKER!

**Find** a large, smooth surface, like a countertop or an uncarpeted floor.

**Slide** the bottle caps across the surface. **Try** flicking, hitting, or sliding the caps. Is it easier to slide some bottle caps than others? Do some caps go farther than others?



**Estimate** how far each bottle cap slid. Then **use** your tape measure to measure the distances.

### LET'S MAKE: MOTMOT LAUNCHER!

**1.** Cut the rubber band.



 Thread each end of the rubber band through a bead or a piece of pasta.







## LET'S ENGINEER!

Frank has been working on his Frank Launcher. It's finally able to launch Frank, but he can't control how far he goes. So if he tries it, he won't know where he'll land!

How can Frank modify his launcher so he goes exactly as far as he wants?

**Stretch** a tape measure on a table. **Stand** a marker up at a distance you think you can hit. Now **try** to knock it down by launching a bottle cap from your MotMot launcher. Did you knock over the marker? If not, **modify** the cap or launcher to try to hit it. If you did knock over the marker, **measure** another distance and try hitting that as well. How can you modify your cap or launcher to hit the marker at a different distance?

