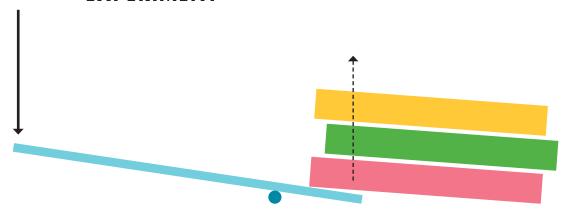
## SIMPLE MACHINES EXPERIMENT



## YOU NEED:

A FIRM RULER (OR OTHER LONG, FIRM, FLAT OBJECT)

A PEN OR PENCIL

A STACK OF BOOKS

## MAKE A LEVER

- 1. Ask your child to use both hands to lift a stack of books up two inches.
- 2. Ask if they could lift the books with just two fingers.
- 3. Slide about two inches of the ruler under the stack of books.
- **4.** Slide a pencil perpendicular to and under the ruler, close to the stack of books but not under it.
- **5.** Hold the pencil in place and ask your child to push down on the ruler with two hands, then with two fingers, and then with one finger.



How many hands or fingers does your child need to lift the stack of books when using the ruler and pencil as a lever? Does it feel easier or harder to lift the stack of books when using the ruler as a lever instead of lifting them straight up?

