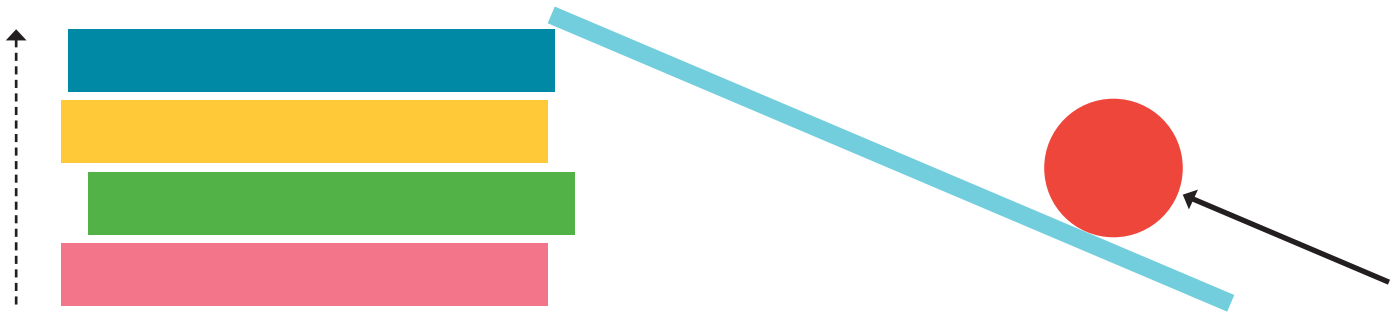


## SIMPLE MACHINES EXPERIMENT



YOU NEED:

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A STACK OF BOOKS, 4-6 INCHES TALL

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

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A ROUND, HEAVY OBJECT LIKE AN ORANGE, PAPER WEIGHT, OR BALL

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### MAKE AN INCLINED PLANE

- 1.** Prop the ruler up on the books so that one end rests on the top of the books and the other on the ground.
- 2.** Ask your child to use two fingers to pinch the object and lift it to the top of the stack of books.
- 3.** Ask your child to use two fingers to roll or slide the object up the inclined plane.

Is it easier or more difficult to lift the object than to roll it up the ramp?

It requires less force over a longer distance to roll the object up the ramp, but some kids might say that it's easier to lift the object. Ask them if their answer would change if the object were very heavy and the height to which they were lifting it was very high.



SIMPLE  
MACHINES

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This activity was designed to support learning in the Simple Machines app. Learn more at [tinybop.com](https://www.tinybop.com).

