

Build a Luge STEM Challenge

Materials

- | | |
|---------------------------------------|--------------------------------------|
| <input type="checkbox"/> Craft sticks | <input type="checkbox"/> Small coins |
| <input type="checkbox"/> Ramp | <input type="checkbox"/> Stopwatch |



Instructions



Create a ramp using a stack of books and the card. Draw a start and finish line on the ramp.

The craft sticks are your luge. Set up four different luges.

1. Craft sticks with no coins
2. Craft sticks with one coin at the front.
3. Craft sticks with one coin at the front and one in the middle.
4. Craft sticks with a coin at the front, one in the middle and one on the back.



Record the time taken for each luge to pass between the start and finish lines.

Repeat 3 times for each Luge.

Can you make the luge even faster by making the ramp steeper?

Gravity pulls the luge down the ramp. The more coins that are added the heavier the luge. A heavier luge has more power (momentum) than a lighter luge. The heavier the luge the harder it is for friction to slow it down.

Heavy things have more power to push past the things trying to slow them down!

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Predictions

I predict the craft stick with coins will travel the fastest and the craft stick with coins will be the slowest.



Results

	Time (seconds)	Time (seconds)	Time (seconds)
No coins			
1 coin			
2 coins			
3 coins			

Conclusion

My prediction was correct

incorrect

