

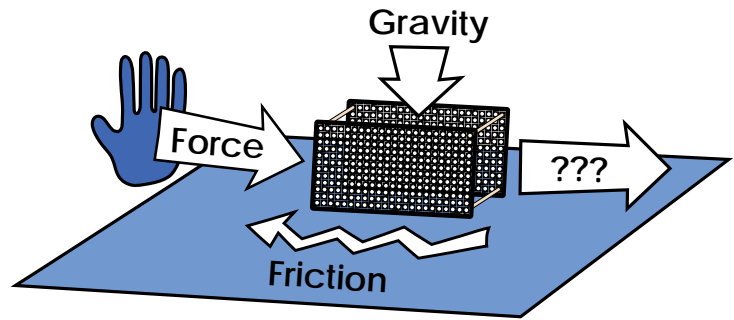
Forces & Friction



Name: _____ Set: _____ Date: _____

Force: A push or pull on an object. A force can cause an object to accelerate, slow down, remain in place, or change shape.

Friction: A force that resists (holds back) the movement of a sliding or rolling object



Gravity: A force attracting objects toward the center of the earth.

Set your racer frame down on a table or desk. Complete the following questions.

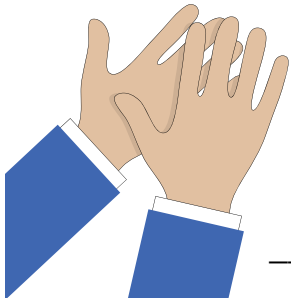
1. A _____ is needed to move the frame.
2. List two different types of force you could use to move your frame.
Hint: How could you use your mouth to apply a force?

a. _____

b. _____

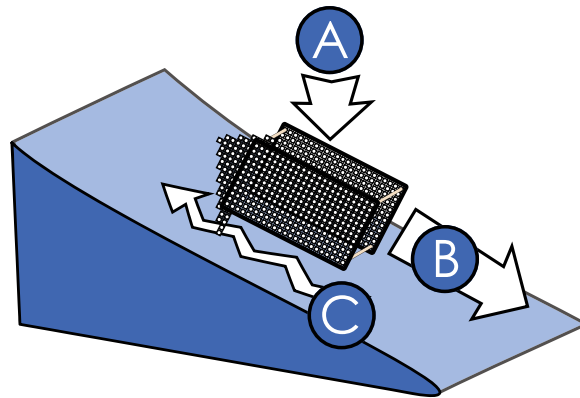
3. Apply a force to your racer frame (push it). Why does the frame stop moving after you stop applying a force? Tip: Read the top of this page.

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4. Rub your hands together fast. The motion is converted through friction into what type of energy? Hint: You should feel it.

Use the letters from the diagram to fill in the blank lines.



5. Force of Gravity _____

6. Force of Friction _____

7. Forward Motion _____

8. If _____ is greater than _____, the sled will move.

9. If _____ is greater than _____

10. _____, the sled will not move.

11. Sometimes you want friction. Other times you don't. Tell us if the following items are design to increase, or decrease friction.



A tire is designed to _____ friction.



Ice Skates are designed to _____ friction.



A frying pan surface is designed to _____ friction.