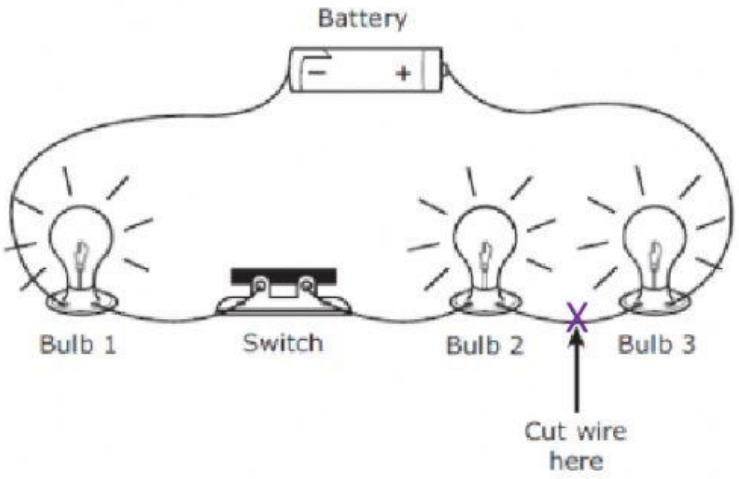


The diagram shows a series circuit with three lit bulbs. How many of the bulbs will remain lit if the wire is cut at the point shown by the arrow?

F 0

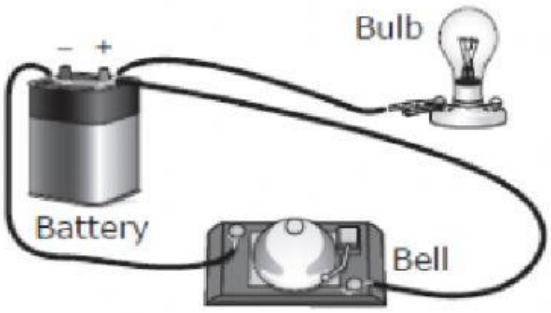
G 1

H 2

J 3

You must make a circle for a circuit to work!
Cut the wire and see if the circuit will work

A group of students built the circuit shown below.



Is the light part of the complete circle?

The lightbulb does not glow. Which statement explains this observation?

F The battery is not charged.

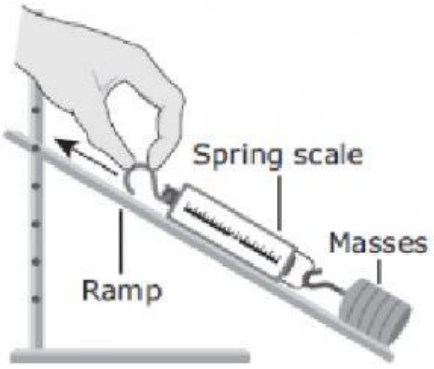
G The lightbulb is not part of a complete circuit.

H The circuit does not have a switch.

J The bell uses most of the energy from the battery.

LIVEWORKSHEETS

Students investigate force. The masses they use begin at rest on the ramp. The setup the students use is shown.



How can you make it easier to pull the weight?

Which change will reduce the amount of force needed to move the masses?

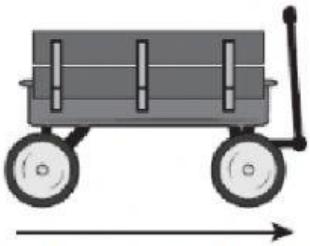
A Decrease the height of the ramp

B Increase the height of the ramp

C Add an additional mass

D Pull the spring scale with two hands

A wagon is pushed and begins to move. As the wagon moves, it slows and comes to a stop. The wagon and the direction it is pushed are shown.



F_____ slows down anything that is moving the opposite way

What force causes the wagon to stop?

A The force of gravity which is acting in the same direction as the arrow

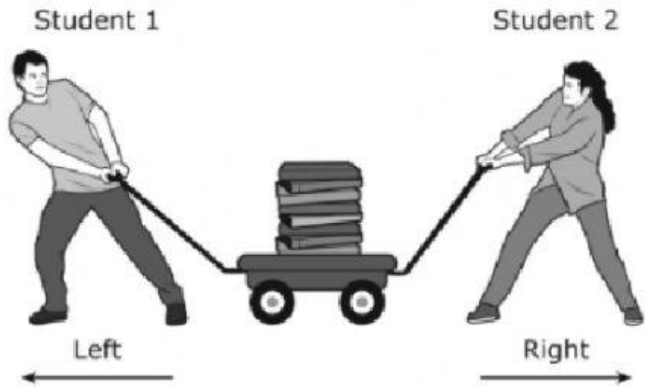
B The force of friction which is acting in the same direction as the arrow

C The force of gravity which is acting in the opposite direction of the arrow

D The force of friction which is acting in the opposite direction of the arrow

LIVEWORKSHEETS

Students fill a cart with books. The cart has a handle on each end.



How can the students work together to move the cart?

Which actions will make moving the cart in one direction easiest for the students?

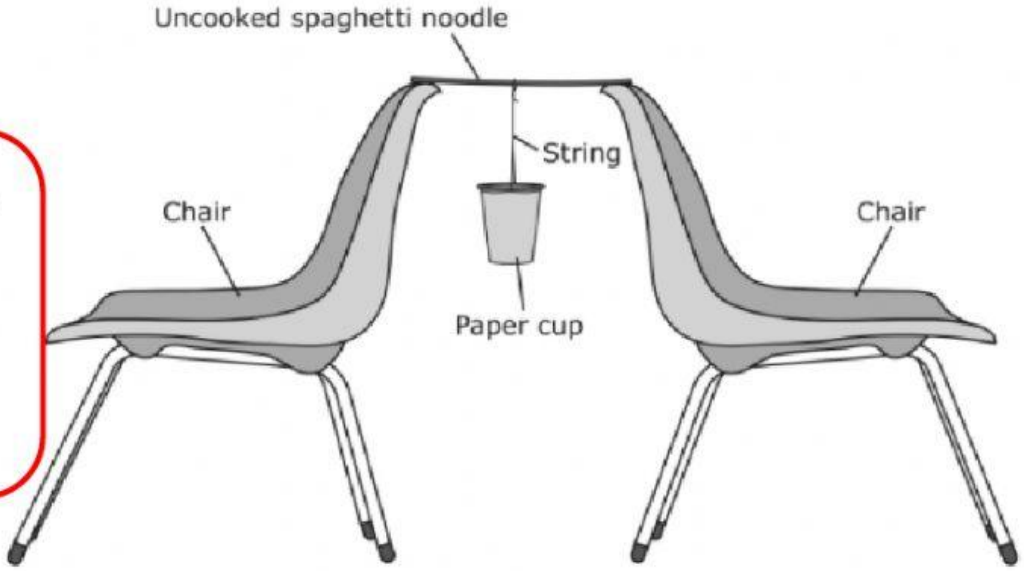
F Student 1 pulls the cart to the left while Student 2 pulls the cart to the right.

G Student 1 pulls the cart to the left while Student 2 pushes the cart to the left.

H Student 1 pushes the cart to the right while Student 2 pushes the cart downward.

J Student 1 pushes the cart to the right while Student 2 pulls the cart upward.

A student conducts the investigation shown in the diagram. In this experiment a paper cup hangs from a string tied to a single uncooked spaghetti noodle. The student measures and records the mass of a penny. The student then adds pennies to the paper cup one at a time.



They're trying to see how strong it is. What do you have to use to break something?

Which question is the student most likely trying to answer with this investigation?

A How many spaghetti noodles will it take to hold up the mass of a penny?

B How much force will it take to break the spaghetti noodle?

C How long should the string that holds the paper cup be in order to support the greatest mass of pennies?

D How does the distance between the two chairs affect the amount of force it takes for the spaghetti noodle to break?

LIVEWORKSHEETS