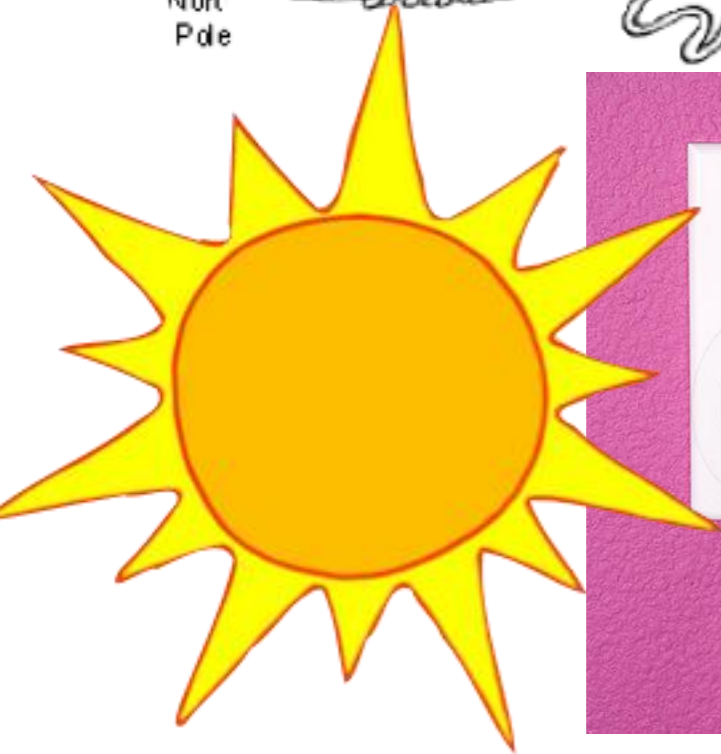
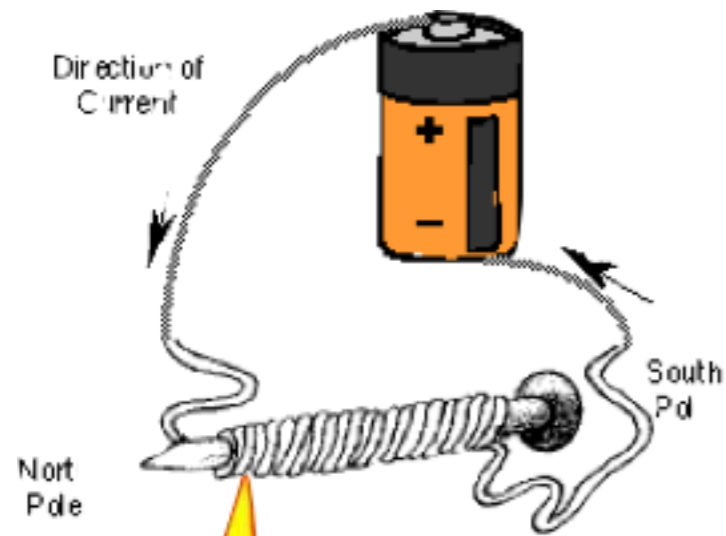


NAME _____



MY TOTAL ENERGY UNIT REVIEW GUIDE

5.1 TYPES OF ENERGY

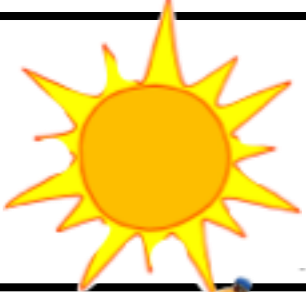

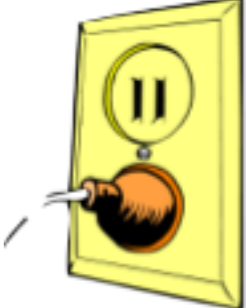


Match the correct picture and description with correct abbreviation that represents the type of energy.

HE- Heat Energy
SE-Solar Energy
CE-Chemical Energy
EE-Electrical Energy
ME-Mechanical Energy

Place a "K" next to the biker that is demonstrating kinetic energy.

Place a "P" next to the biker(s) that is demonstrating potential energy.

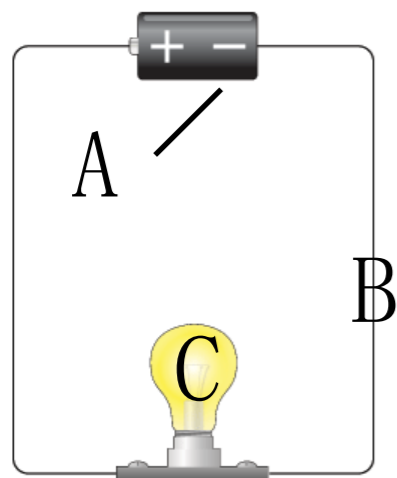


ENERGY	Description	ENERGY	Picture
	Energy stored in the particles of matter.		
	Energy caused by the movement of the particles of matter.		
	Energy caused by the position and movement of an object.		
	Energy caused by the movement of electrons through an object.		
	Energy that comes from the sun.		

5.2/5.4 ENERGY TRANSFORMATIONS

Identify the energy transformation in each scenario.

1.



Identify the parts of the circuit.

A. _____

B. _____

C. _____

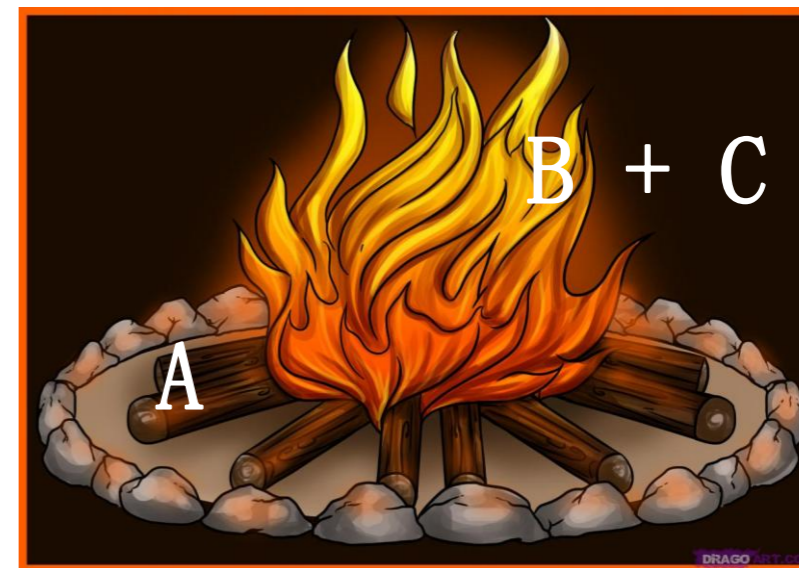
Which part is not labeled?

A

B

C

3.

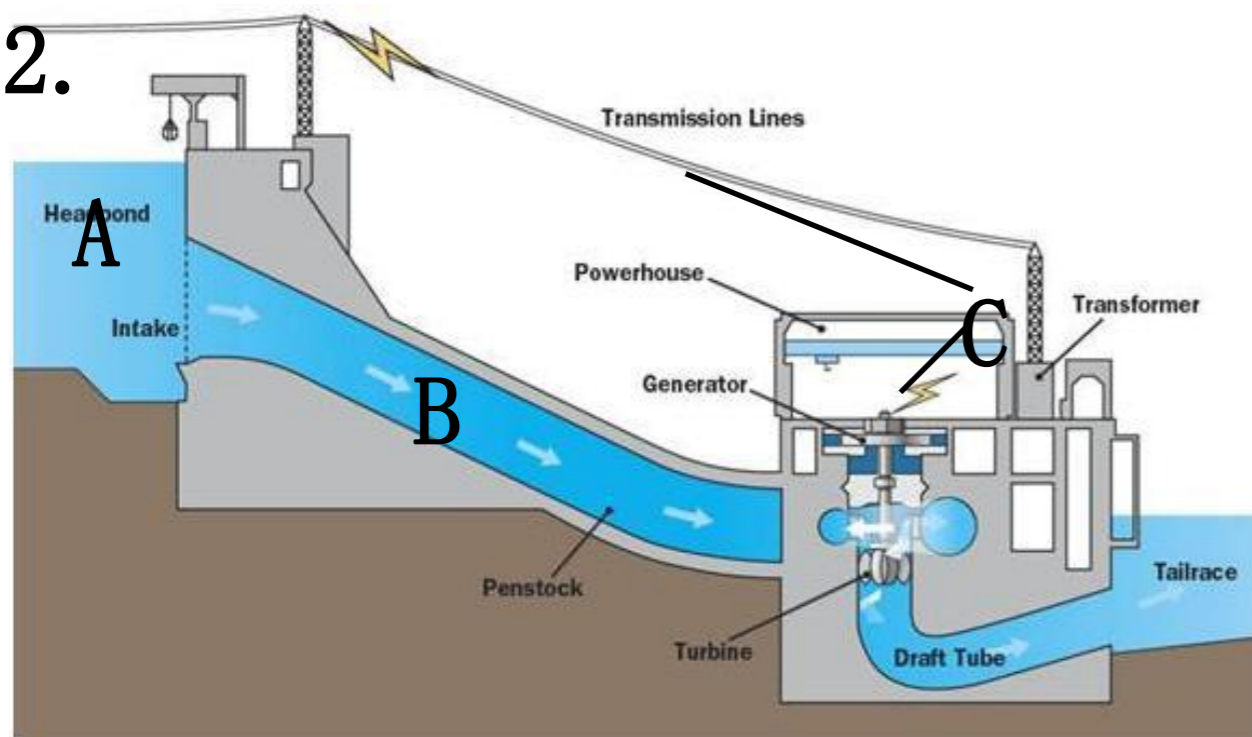


A

B

C

2.

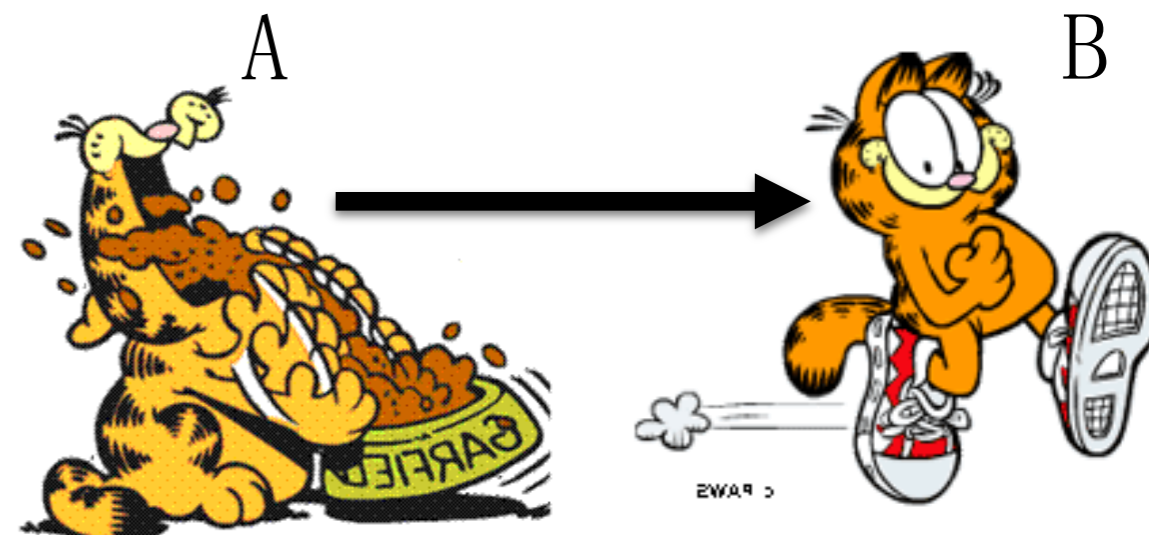


A

B

C

4.



A

B

5.3 MAGNETISM & ELECTRICITY

Answer some questions about the electromagnet.

1- What is the source of energy for the electromagnet?

2- Which part of the electromagnet carries the electricity?

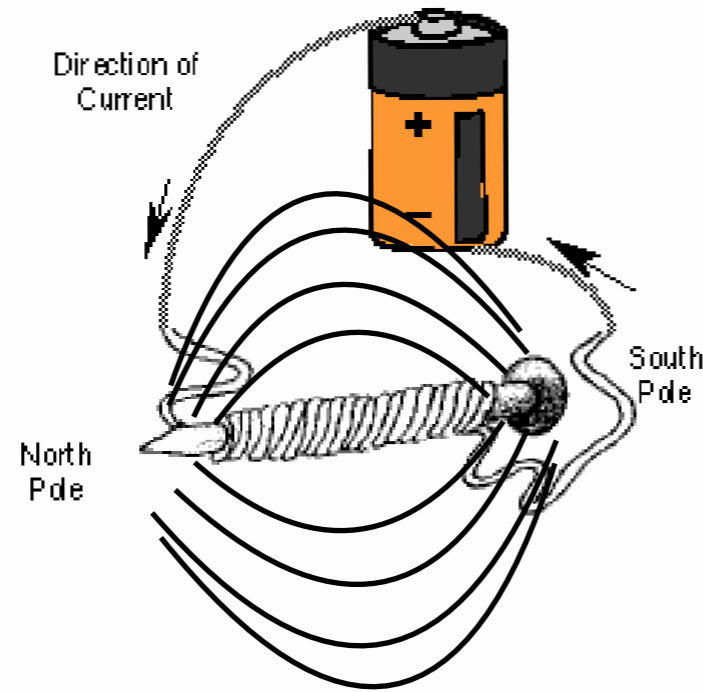
3- Which part of the electromagnet becomes the temporary magnet?

4- What imaginary lines represent a force that can push or pull paperclips?

5- What are the names of the strongest parts of the temporary magnet? _____

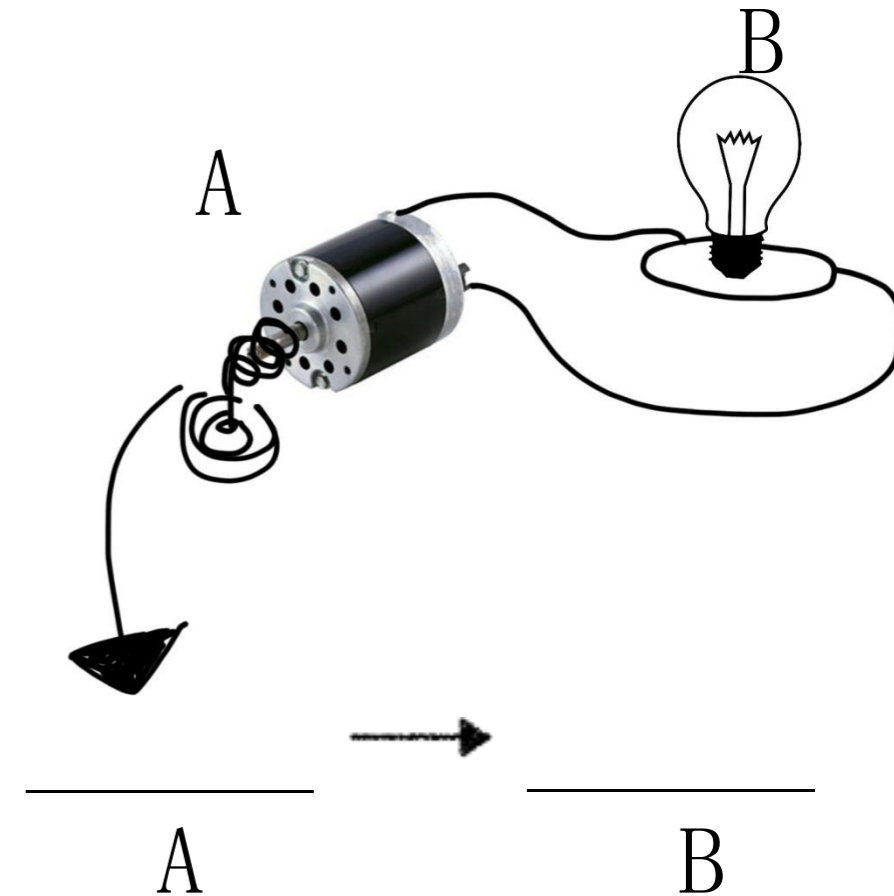
6- What will decreasing the number of coils around the nail cause?

Building an Electromagnet



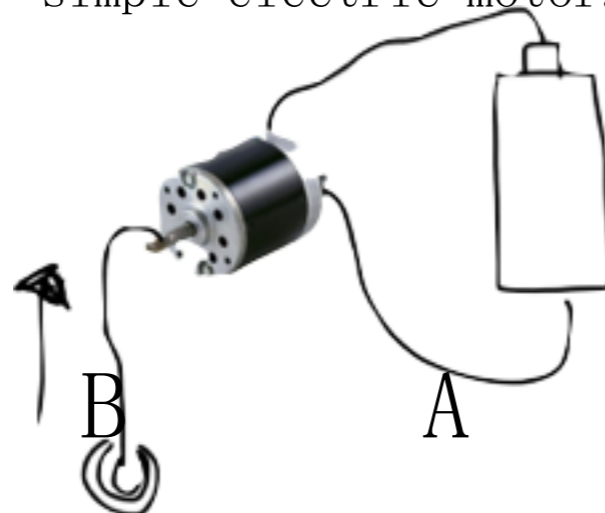
GENERATORS

Identify the energy transformations in the GENERATOR.



ELECTRIC MOTORS

Identify the energy transformations in the simple electric motor.



Circle the letters in the underlined title of this section that will help you remember the energy transformations.

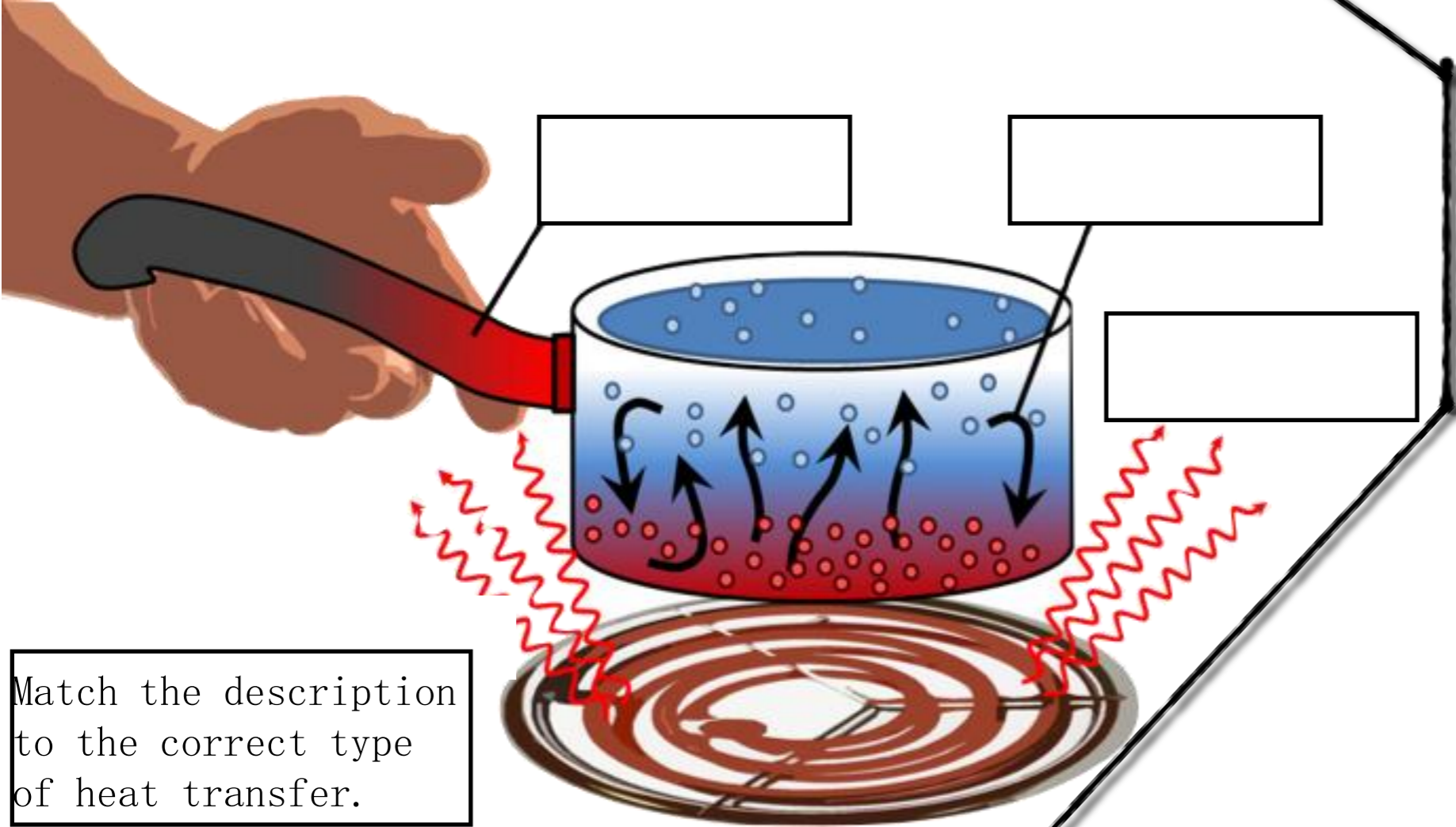


GENERATORS Generate Electricity! For who, who, who?

For _____ ,
_____, _____!

5.5 HOW HEAT ENERGY IS TRANSFERRED

Write the correct type of heat transfer in the spaces provided.



Match the description to the correct type of heat transfer.

- Picture yourself walking across the hot sand with your bare feet. _____
- Imagine the warm air rising from the equator and the cold air sinking from the poles. _____
- Imagine the heat of the sun tanning your skin while you lay on a beach towel. _____

5.6 ENERGY & WORK

ENERGY USE	IS WORK DONE? WHY?
A student pushes on a wall until she is exhausted.	
A book falls off the table and hits the floor.	
An electric fan cools the room.	
A student is wearing a heavy book bag while waiting for the bus.	
A rocket accelerates through space.	

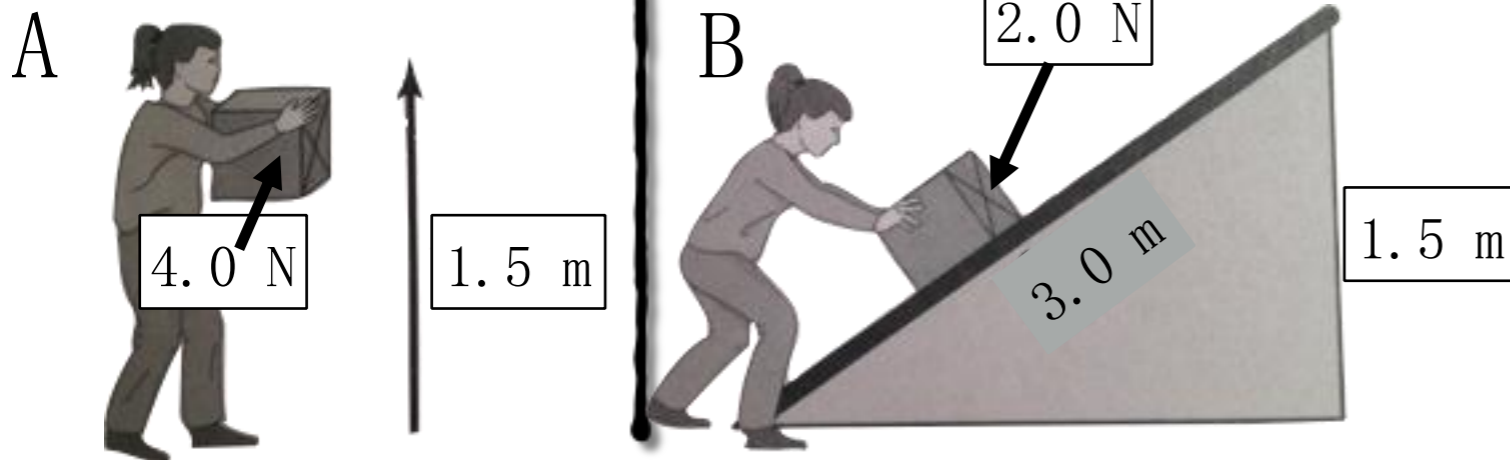
Questions

1. What is the push or pull of an object called? _____
2. What device measures force on or by an object? _____
3. What is the force exerted on an object multiplied by the distance the object travels called? _____

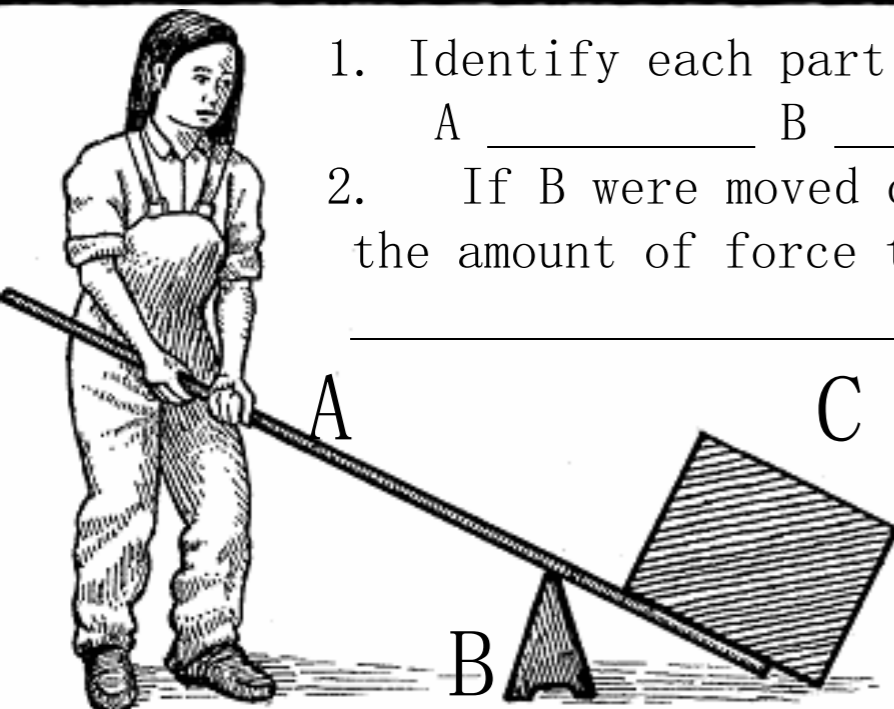
5.7 SIMPLE MACHINES

Which do simple machines help reduce or decrease? Circle one.

WORK or FORCE

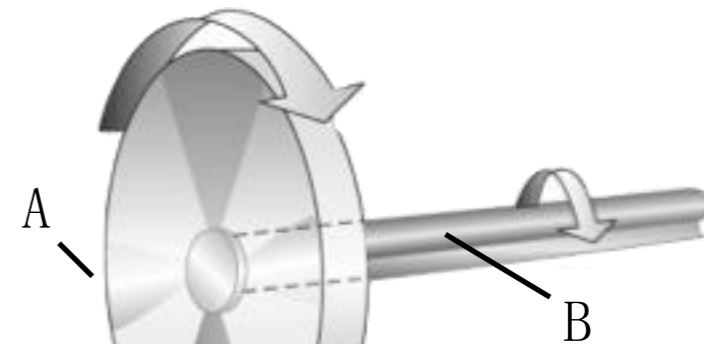


1. Which scenario (A or B) requires less force for the girl to move the box to a height of 1.5 m ? _____
2. Which scenario (A or B) requires the girl to do more work? _____
3. What kind of simple machine is the girl using? _____



1. Identify each part in this simple machine.
A _____ B _____ C _____
2. If B were moved closer to A, how would the amount of force the girl uses change?

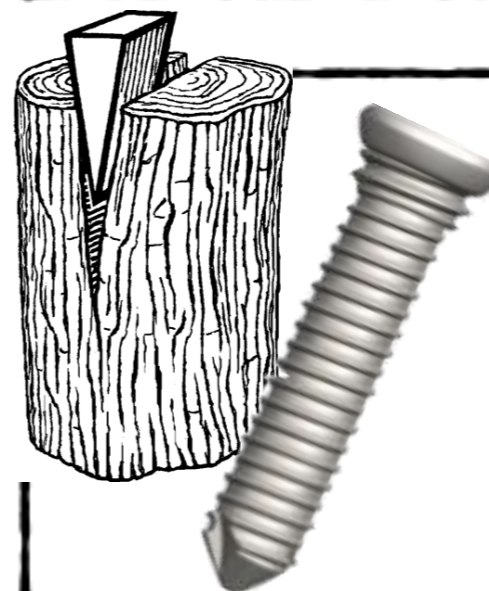
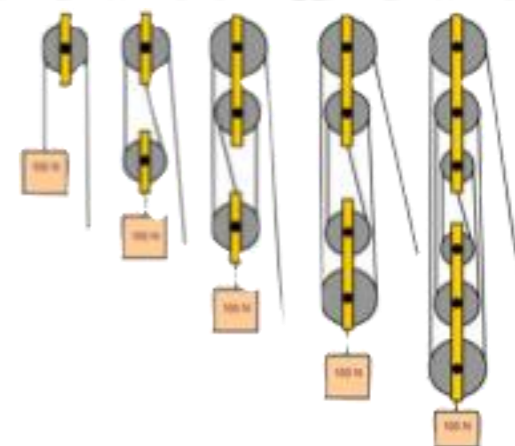
3. What kind of simple machine is the girl using?



Identify the parts of the simple machine.

A _____ B _____

How does adding extra pulleys affect the amount of force needed to lift the box?

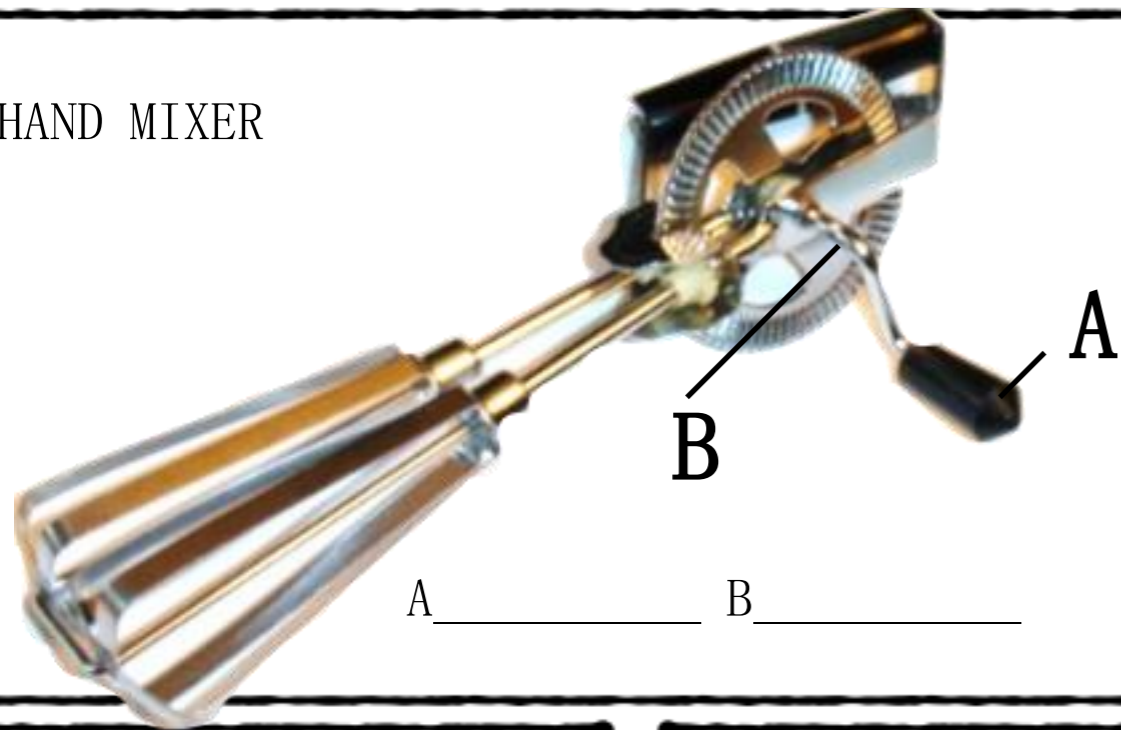


Both of these simple machines are modified forms of what other simple machine?

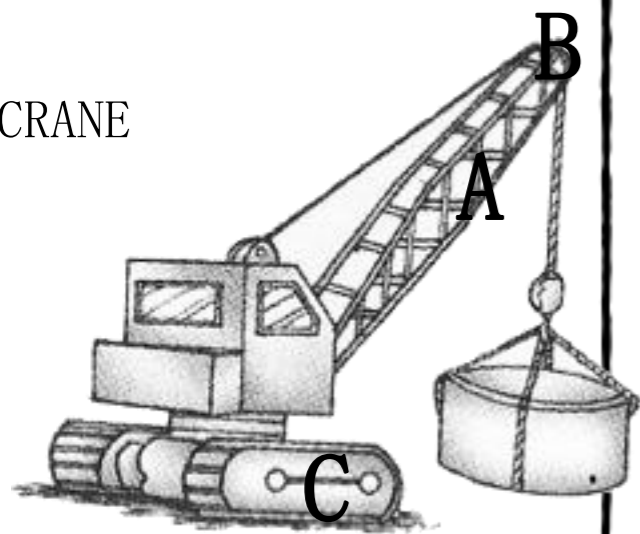
5.8 COMPOUND/COMPLEX MACHINES

Identify the simple machines that make up each compound/complex machine.

HAND MIXER



CRANE



NAIL CLIPPERS

