

Choose the correct option

1. Which of the following is not an example of the simple machine:

- A) juicer B) stapler C) nail clipper D) scissors

2. A light bulb is an example of a:

- A) lever B) screw C) wedge D) wheel and axle

3. Gears moving in a circular motion are a type of:

- A) lever B) screw C) wedge D) wheel and axle

4. Toilet paper on a roller is an example of a:

- A) pulley B) wheel and axle C) inclined plane D) lever

5. The metal cap of a bottle can be opened by using a bottle opener. In this case the bottle opener works as a:

- A) screw B) wedge C) lever D) pulley

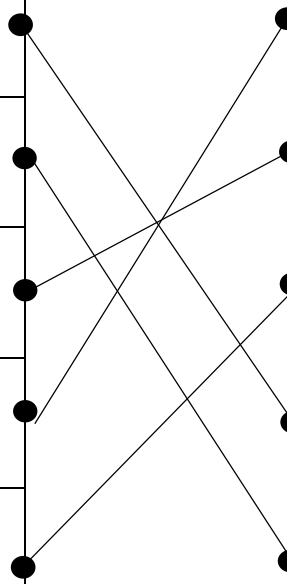
6. A flagpole is an example of a:

- A) lever B) pulley C) wheel and axle D) all of them

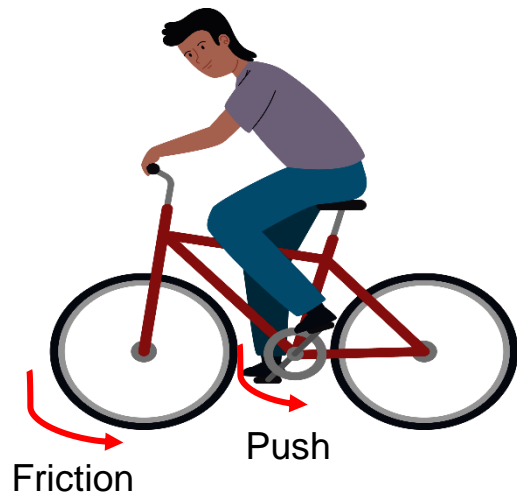
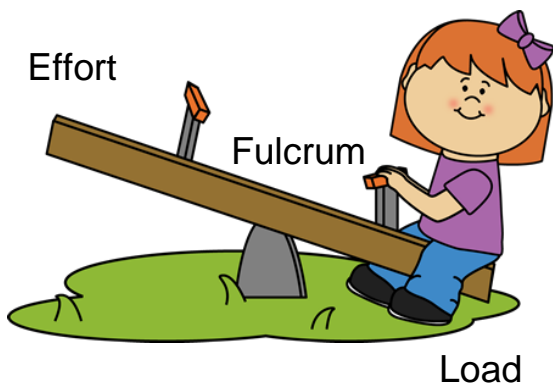
Fill in the blanks

- i. A device or tool used to make the work easier and faster is called machine.
- ii. A simple machine has few or no moving parts.
- iii. A compound machine is made up of two or more simple machines combined together.
- iv. A simple machine is made up of a bar or rod, which rests and turns on a fixed point is called a lever.
- v. A simple machine is used to cut or split things apart is called a wedge.
- vi. A simple machine that is used to fasten or hold materials together is called a screw.
- vii. A simple machine with a slanting surface used to move heavy loads up or down is called an inclined plane.
- viii. A simple machine consisting of a rope or string, wound around a grooved wheel is called a pulley.
- ix. The rod that goes through the wheel and helps the wheel to move is called an axle.

Match the column A with column B:

Column A		Column B
Two inclined plane joined back to back, used to cut or split things apart		Inclined plane
A rigid bar or rod that rests and moves on a support and is used to move a heavy load easily		pulley
a rope or string wound around a grooved wheel, used to move objects up, down, or across		screw
a slanting surface used for moving objects from lower to higher or higher to lower surfaces easily		wedge
an inclined plane wrapped around a cylindrical pole that is used to fasten, or hold things together		lever

Label the diagram.

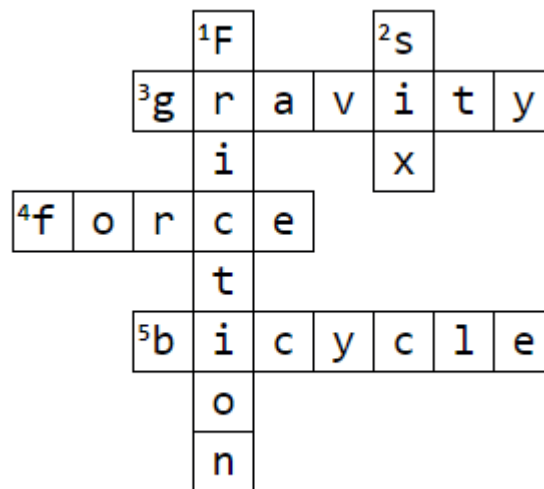


Find and circle the names of the following words in the square below.

Distance	Drill	Flagpole	Force	Fork	Friction
Gravity	Inclined plane	Lever	Pull	Pulley	Push
Ramp	Screw	See-saw	Speed	Wedge	Windmill
Wheel and axle					

K	I	G	W	H	E	E	L	A	N	D	A	X	L	E
Q	P	R	Q	L	Y	I	F	L	A	G	P	O	L	E
V	F	P	U	S	H	B	I	P	H	B	W	Y	Q	P
T	B	Z	T	P	F	C	N	J	F	R	C	U	J	U
P	S	E	U	F	O	R	C	E	R	R	B	R	G	L
W	G	H	H	B	R	G	L	Z	I	P	I	D	R	L
I	Z	F	C	W	K	S	I	P	C	E	X	D	A	E
N	Y	M	A	G	H	M	N	G	T	W	P	R	V	Y
D	I	S	T	A	N	C	E	J	I	N	U	I	I	F
M	I	B	V	V	W	G	D	S	O	L	L	L	T	B
I	S	J	J	R	A	M	P	C	N	E	L	L	Y	Z
L	P	L	C	Y	D	W	L	R	T	V	U	W	L	O
L	E	P	H	P	S	S	A	E	W	E	D	G	E	P
V	E	N	Z	J	T	K	N	W	P	R	N	I	Y	K
B	D	N	S	J	H	S	E	E	S	A	W	X	Q	S

Crosswords



Across

3. Natural force
4. Push or pull
5. A compound machine

Down

1. Slows down things
2. Number of simple machines

Jumbled Words

- | | | | |
|---------------|-----------------|-------------|---------------|
| i. Focre | <u>Force</u> | ii. Reelv | <u>Lever</u> |
| iii. Notiom | <u>Motion</u> | iv. Cewrs | <u>Screw</u> |
| v. Vitgray | <u>Gravity</u> | vi. Earsg | <u>Gears</u> |
| vii. Ricftion | <u>Friction</u> | viii. Gewed | <u>Wedge</u> |
| ix. Chiname | <u>Machine</u> | x. Yellup | <u>Pulley</u> |


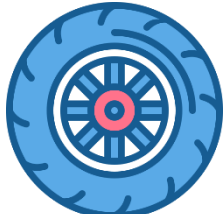
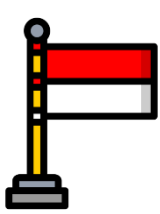


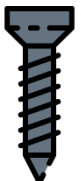

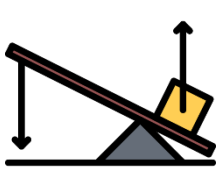

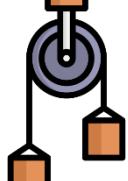
Write “T” for the true and “F” for the false statement.

- i. Gears are a type of lever.
- ii. A pulley is a compound machine.
- iii. Lever help to raise or lower a heavy load.
- iv. Rubbing hands is an example of lever
- v. Gravity pulls everything towards the center of the earth.

T
F
T
F
T

Drag and Drop

Look at the pictures and write their names in the relevant column.

				
Drill	Wheel and axle	Flagpole	Inclined plane	Spade
				
Screw	Bicycle	Lever	Playground slide	Pulley

Gadget

Drill

Bicycle

Playground slide

Spade

Flagpole

Machines

Screw

Wheel and axle

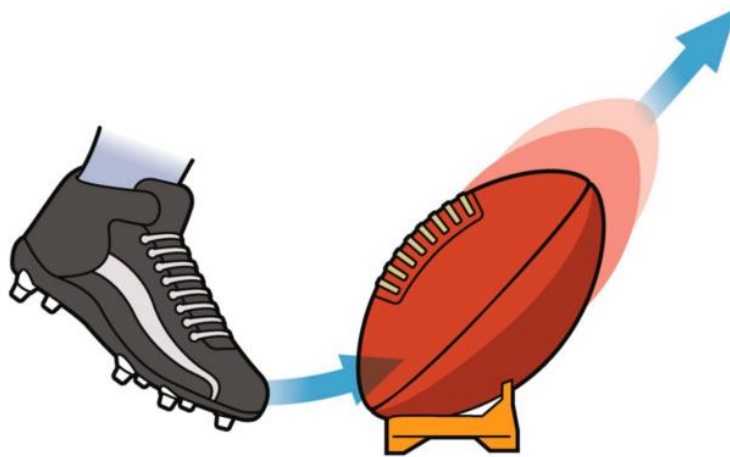
Inclined plane

Lever

Pulley

Comprehension:

A force is a push or pull that can make things move, stop, or change direction. Imagine kicking a soccer ball. Your foot applies a force that makes the ball move forward. If you push a toy car across the floor, your hands exert a force on it. The car starts moving because of this force. Forces can also stop objects from moving. If you kick a soccer ball and then stop, the ball eventually stops too because no force is pushing it anymore.



1. What is a force?

A force is a push or pull that can make things move, stop, or change direction.

2. Give an example of using a force to make something move.

Pushing a toy car across the floor with your hands.

3. Can forces stop objects from moving?

Yes, forces can also stop objects from moving.

Short Question Answers.

1. If an object is acting as a lever, what is the force applied to the object called?

The force applied to the object is called effort.

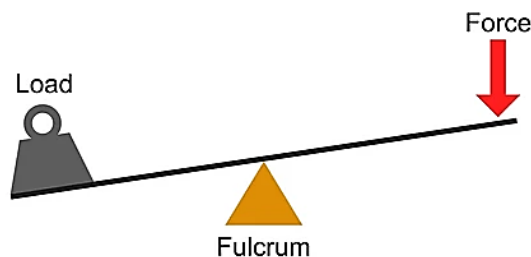
2. What is the point where a lever moves called?

This point is called fulcrum.

3. How is a simple machine different from a compound machine?

Simple Machine	Compound Machine
A simple machine has few or no moving parts. Example: Lever etc.	When two or more simple machines are put together, they make a compound machine. Example: Wheel barrow etc.

4. Draw a lever and label all three parts of it.



5. Where do you see the use of pulleys? Give at least three examples from your daily life.

Pulleys are used in:

- Flagpoles
- Window blinds
- Clothing line

6. How do wheels and axles make our work easier?

The wheel and axle is a simple machine that reduces the friction involved in moving an object, making the object easier to transport.

7. How can you say that inclined planes are machines? Give at least three examples from your daily life to support your answer.

An inclined plane has a sloping surface that reduces the force needed to raise a load and make our work easier.

Examples in our daily life:

Slides, rooftops, stairs and ramps.

8. What are some advantages and disadvantages of friction? Explain with reasoning.

Advantages	Disadvantages
Friction is used to slow things.	Friction can slow the speed of objects.
It is used to produce heat.	Too much heat can cause fire.
It also allows us to walk.	It can also wear things. Such as shoe sole.

9. Read the following situations carefully and decide which simple machine should be used to solve these problems.

Situation 1

Ali lives on the fourth floor of an apartment which does not have a lift. He is supposed to carry bucket full of water to his apartment. Suggest which simple machine is best to help in this situation. Explain how that machine would be used.

A pulley could be used to pull the water up to a window.

Situation 2

A person need to load a heavy bag of rice onto a truck. Suggest which simple machine is best to help in this situation. Explain how this machine would be used.

A ramp could be used to reduce the force needed to raise the load.

Situation 3

A man needs to move a large, heavy stone from the road to avoid an accident. Suggest which simple machine would help best in this situation. Explain how this machine would be used.

A lever would be best to be used.

Fun page

Find 13 words from unit heat in the grid below.

Here are the first letters of the words you are looking for:

B, C, D, E, F, F, H, L, M, P, T, T, T

M	I	G	U	S	T	A	D	E	S	T	U	D
F	A	H	R	E	N	H	E	I	T	I	O	E
S	P	E	A	N	O	L	G	P	E	R	O	N
O	H	A	B	L	P	A	R	T	I	C	L	E
M	U	T	C	H	O	X	E	Z	T	F	U	V
T	H	E	R	M	O	M	E	T	E	R	N	A
E	M	E	M	A	N	E	Q	H	U	E	E	P
S	P	G	A	S	D	L	Y	E	I	E	P	O
L	A	B	O	R	A	T	O	R	Y	Z	E	R
K	A	O	Y	A	Y	R	P	M	T	I	V	A
W	B	I	X	D	K	P	S	A	O	N	I	T
C	E	L	C	I	U	S	N	L	O	G	J	E
F	J	I	Q	O	T	R	A	N	S	F	E	R
K	I	N	E	T	I	C	H	B	G	N	L	C
R	S	G	U	L	C	L	O	N	I	C	A	L