



# SHREE VASISHTHA VIDHYALAYA

Science Worksheet 2024-25

Name :- \_\_\_\_\_

Roll No :- \_\_\_\_\_

Worksheet - PA2 -02

Std.:- V - \_\_\_\_\_

Date :- \_\_\_\_\_

## Chapter No.11 Simple Machines

### Q-1 Choose the correct option

- 1) Which of the following is a simple machine?  
a) Bicycle ☐ b) ☒ Lever ☐ c) Refrigerator
- 2) A seesaw in a playground is an example of which simple machine?  
a) Wedge ☐ b) ☒ Pulley ☐ c) ☒ Lever
- 3) A knife is an example of which type of simple machine?  
a) Pulley ☐ b) Lever ☐ c) ☒ Wedge
- 4) Which simple machine is used to draw water from a well?  
☒ a) Pulley ☐ b) Screw ☐ c) Wheel
- 5) A ramp is an example of which type of simple machine?  
a) Screw ☐ b) ☒ Inclined plane ☐ c) Wedge
- 6) What type of simple machine is a doorknob?  
a) Lever ☐ b) ☒ Wheel and axle ☐ c) Pulley
- 7) Which of these is NOT a simple machine?  
a) Scissors ☐ b) ☒ Car engine ☐ c) Inclined plane
- 8) The fixed point around which a lever moves is called the:  
a) Load ☐ b) Effort ☐ c) ☒ Fulcrum
- 9) A screw is a type of:  
a) Lever ☐ b) ☒ Inclined plane ☐ c) Wedge
- 10) Which simple machine consists of a wheel with a rope or chain?  
a) Screw ☐ b) ☒ Pulley ☐ c) Lever

### Q-2 Fill in the Blanks

- 1) In a fixed pulley the wheel is fitted to some support.
- 2) A gentle slope is called an inclined plane.
- 3) An inclined plane reduces the effort needed to lift an object.
- 4) A screw is an inclined plane wrapped around a rod, cylinder or pole.
- 5) A wedge is used to split or cut things apart.
- 6) In a wheel and axle, the rod is attached to the wheel to rotate it.
- 7) The pushing force used on the lever is called the effort.
- 8) A knife is a combination of a lever and a \_\_\_\_\_.
- 9) Simple machines make work easier by reducing the effort needed.
- 10) Wheels that have teeth are called gears.

### Q-3 State True or False.

- 1) A lever is a type of simple machine. T
- 2) A wheel and axle system helps in reducing the effort needed to move heavy objects. F



- 3) A pulley is used to push objects, not to lift them.
- 4) An inclined plane makes it harder to lift heavy objects.
- 5) Scissors are an example of a compound machine made using levers.
- 6) A screw is a type of simple machine.
- 7) A wedge is used to hold objects together.

F  
F  
F  
T  
F

Q-4 Match the following.

Column A

1. Lever
2. Pulley
3. Inclined plane *d*
4. Wheel and axle *j*
5. Screw *c*
6. Wedge *g*
7. First-class lever *f*
8. Second-class lever *e*
9. Third-class lever *j*
10. Simple machine *i*

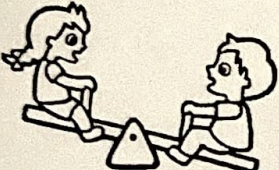
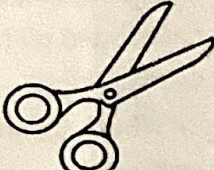

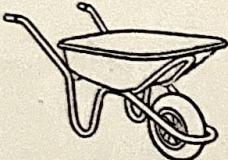

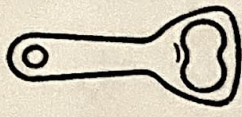
Column B

- a. Fixed point (fulcrum)
- b. Used to lift objects
- c. Spiral inclined plane
- d. Sloping surface
- e. Load in the middle
- f. Fulcrum in the middle
- g. Cutting or splitting
- h. Rotating mechanism
- i. Reduces effort force
- j. Effort in the middle

Ans:-

- 1- a
- 2- b
- 3- d
- 4- h
- 5- c
- 6- g
- 7- f
- 8- e
- 9- j
- 10- i

Q-4 Identify the following simple machines and classify them according to their lever type.

1) 		
First class lever	First class lever	First class lever
4) 	5) 	
Second class lever	Third class lever	Second class lever

Q-5 Read the following two statements and choose the correct option.

1) Statement 1 A lever is a bar which can turn about a point called fulcrum.

Statement 2-The object that we are trying to lift is called the load.

- ✓ a. Both statement 1 and 2 are correct      b. Statement 1 is incorrect but statement 2 is correct  
c. Both statement 1 and 2 are incorrect      d. Statement 1 is correct but 2 is incorrect

2) Statement 1-When the load is between the fulcrum and effort, it is called the first class lever.

Statement 2-When the effort is between the fulcrum and the load, it is called a third class lever.

- a. Both statement 1 and 2 are correct      ✓ b. Statement 1 is incorrect but statement 2 is correct  
c. Both statement 1 and 2 are incorrect      d. Statement 1 is correct but 2 is incorrect

3) Statement 1-A Pulley is a small wheel.

Statement 2-A slide is an inclined plane

- ✓ a. Both statement 1 and 2 are correct      b. Statement 1 is incorrect but statement 2 is correct  
c. Both statement 1 and 2 are incorrect      d. Statement 1 is correct but 2 is incorrect