

CLASS NOTES

Class: V

Topic: Chapter-14
Lenses and Microscopes.

Subject: EVS

(This written content has been absolutely prepared from home.)

Note: Write the content in your EVS notebook.

Important points to remember-

1. **Lens-** A special, clear curved piece of glass is known as lens. The lenses can curved towards inwards or outwards.

On the basis of their curve surface the lenses are of 2 types-

a.) **Convex Lens-** A piece of glass which has curved surface bulged outwards or are thicker I the middle is known as Convex Lens.

b.) **Concave Lens-** A piece of glass which has curved surface moved inwards or are thinner in the middle is known as Concave Lens.

2. **Pathology-** it is the study of diseases.

3. **Pathologists-** The doctors who examine the urine, stool, blood or sputum of the patients under the microscope.

4. **Cells-** The bodies of living beings are made of tiny things called cells. Living beings are made of billions of cells joined together.

Ex. A) Write short answers-

Q.1 Name four instruments that have lenses?

Ans- Four instruments are-

1. Binoculars
2. Camera
3. Projector
4. Glasses

Q.2. Which organ in our body has a lens?

Ans. Our eyes have lenses to see the things.

Q. 3. What is a magnifying glass used for?

Ans. – A magnifying glass is used for observing tiny things by making them look bigger.

The magnifying glass is a kind of convex lens.

Q.4 Does a magnifying glass magnify things that are far away?

Ans. No, a magnifying glass cannot magnify the things those are far away. It can magnifies tiny things when you hold it close to that thing.

Q.5 How do microscopes help a doctor diagnose the disease a patient has?

Ans. Microscope helps pathologists to examine the patients' stool, blood ,sputum or urine to find out the microorganism present in the patient's body. His helps the patient's doctor to diagnose the kind of disease the patient has.

Ex. B) Write "True" or " False"

- | | |
|--|--------------|
| 1. Lenses can be concave or convex. | TRUE |
| 2. Pathologists identify the germs present in a patient's body | TRUE |
| 3. Our bodies are made of cells. | TRUE |
| 4. Binoculars are used to see heavenly bodies. | FALSE |
| 5. Telescopes are used to magnify tiny things. | FALSE |

Extra questions-

1. Differences between Convex lens and concave lens

SN	Concave lens	Convex lens
1.	A concave lens is one where the center of the lens is thinner than the edges.	A convex lens is one where the center of the lens is thicker than the edges.
2.	It is a diverging lens. It means it spreads out light rays .	It is converging lens. It means it focuses the light rays passing through at one point.
3.	It is used to see things clearly that are present nearby.(It corrects shortsightedness)	It is used to see things the distant objects clearly.(it corrects Farsightedness)
4.	 Concave	 Convex

Test -3 (page no.-74)

Ex. A) Write short answers.

Q.1) What is a molecule?

Ans- A group of atoms joined together is called is called a molecule.

Q.2) Name an element we use every day.

Ans. Oxygen

Q.3) What is a force?

Ans- A push or a pull is called a force.

Q.4) What is gravitational force?

Ans- The pull of the earth with which it attracts all the things on or near it, is called gravitational force.

Q.5) How does a pulley make work easier?

Ans- A pulley makes work easier by changing the direction in which we have to apply force.

Q.6) What kind of a simple machine is a bottle opener?

Ans- A bottle opener is a lever.

Q.7) Name an organ in our body that has a lens?

Ans - Our eyes have lenses.

Q.8) What are microscopes used for?

Ans - Microscopes are used by the pathologists to find out germs present in the patients stool, urine, blood

And sputum.

Ex- C) Fill in the blanks-

1. A molecule of oxygen has.....**two**.....atoms of oxygen.
2. Matter exists in**three**.....states.
3. Work is done when a**Force**..... is applied on an object and it moves.

4. The capacity to do work is called.....**energy**..... .

5. Anything that makes it easier for us to do work is a**simple machine**..... .

6. The point about which a lever moves freely is its**Fulcrum**..... .

7. Our body is made of billions of tiny**cells**.....

Ex. D) Choose the right answer-

1. Sugar is-

- a. **a compound** b. an element c. an element d. a liquid

2. Magnets attract-

- a. All metals b. **some metals** c. only Iron

3. People oil machines to-

- a. **reduce friction** b. increases friction c. make them shine

4. A knife is

- a. A lever b. an inclined plane c. **a wedge**