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Exploring Magnets

ORAL QUESTIONS

A. Answer these questions orally.

1. Name three metals which can get attracted towards a magnet.
2. What is the process of losing magnetic power by a magnet called?
3. Name a substance which is used to make good permanent magnets.
4. Name a magnetic material.
5. Name a nonmagnetic material.
6. Name the natural magnet.
7. What does magnetite consist of ?
8. What are the two ends of a magnet called?
9. What are the names of the two ends of a magnet?
10. Where is of the power of a magnet concentrated?

B. Fill in the blanks.

1. Earth behaves like a huge _____
2. The north pole of the Earth behaves like the magnetic _____ pole.
3. The south pole of the Earth behaves like the magnetic _____ pole.

PUZZLE/QUIZ

C. Pretend that you are a 'magnet'. Now, answer the following questions.

1. Which objects can you attract?

_____

2. Name three metals which you cannot attract.

_____

3. Do you always occur naturally?

_____

4. What are your two ends called? What are they named as?

_____

5. Where is most of your power concentrated?

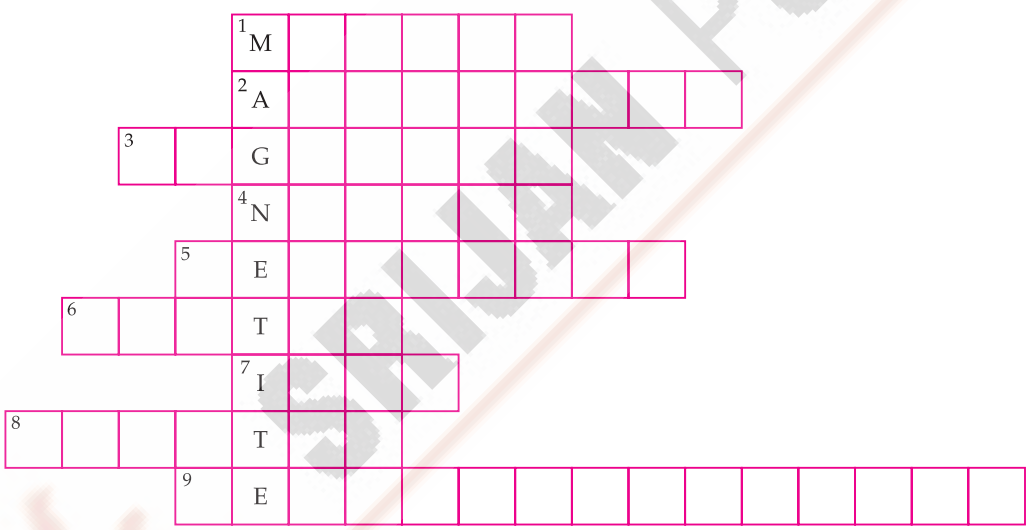
_____

6. What happens to your magnetic power as we move towards your centre?

7. Can you ever lose your magnetic power?

D. Complete the following word ladder with the help of the clues given.

1. An object which attracts certain metals like iron and cobalt
2. A nonmagnetic material
3. A material which is attracted to a magnet
4. An example of a magnetic material
5. A force that pushes away something
6. In a magnet, the magnetic power is negligible here
7. Magnetite is made of oxide of this metal
8. Another nonmagnetic material
9. The process of losing magnetic power by a magnet



CLASS TEST

E. MCQ–Tick (✓) the correct option.

1. A force that pushes away something is called
   - (a) Repulsion
   - (b) Attraction
   - (c) Action
   - (d) Friction

2. The power of a magnet is concentrated at its

(a) Centre ☐ (b) Poles ☐

(c) Sides ☐ (d) Whole surface ☐

3. Which of the following is not a magnetic material?

(a) Iron ☐ (b) Nickel ☐

(c) Gold ☐ (d) Cobalt ☐

4. 'Keepers' for storing magnets are made of

(a) Soft iron ☐

(b) Steel ☐

(c) Aluminium ☐

(d) Copper ☐

F. Very short answer questions.

1. Where was the first natural magnet found?

2. What are the different shapes in which artificial magnets are formed?

3. In which direction does a magnet come to rest when suspended freely?

4. What do you understand by north pole?

5. What do you understand by south pole?

6. What is the sure test of magnetism?

7. How many keepers are required to store a U-shaped magnet?

8. Do like poles repel or attract each other?

G. Short answer questions.

1. Magtnetic poles of a magnet always exist in a pair. Explain.

2. What is a magnetic compass?

3. List three precautions which should be taken while handling magnets.

4. How should bar magnets be stored?

5. When is a magnet called demagnetised?

H. Long answer questions.

1. Describe how magnets were discovered.

2. Explain the process by which an iron rod can be magnetised.

HOME ASSIGNMENT

I. Think and answer.

1. Dhruv suspended a bar magnet freely with a thread. He observed that the magnet came to rest in the north-south direction. He disturbed the magnet and found that the magnet again came to rest in the north-south direction? Why does this happen?

2. Eklavya had a bar magnet. He heated the bar magnet to a very high temperature. He then brought the magnet near an iron object and found that the magnet did not attract the iron object. What could be the reason?

WORKSHEET

J. Give reasons for the following.

1. Magnets should be kept away from things like television radio, etc.

2. Magnets should be handled carefully.