SCIENCE EXPERIMENT

Name: _____

Date: _____

Observing the Behavior of Magnets Near Iron-Rich Rocks

Objective: To observe how a magnet interacts with rocks that may contain iron.

Background: Some rocks contain iron or iron-bearing minerals, like magnetite. Magnets can attract these minerals. In this experiment, you will test different rocks to see how they respond to a magnet.

MATERIALS

- Bar magnet (or horseshoe magnet)
- 4–6 different rocks (test one at a time)
- White paper
- Pencil
- Magnifying glass (optional)

SAFETY

- Magnets can pinch fingers or snap together. Handle with care.
- Keep magnets away from electronics, credit cards, and pacemakers.
- Wash hands after handling rocks.

PROCEDURE

1. Place the white paper on a flat surface.
2. Choose one rock to test. Observe its color and texture.
3. Slowly bring the magnet near the rock. Do not touch at first.
4. Observe what happens. Does the rock get pulled toward the magnet? Does the magnet stick to the rock?
5. If the magnet sticks, try lifting the rock gently with the magnet.
6. Record your observations in the table below.
7. Repeat steps 2–6 for each of your rocks.

OBSERVATIONS

Rock # (or Name)	Color	Texture (grainy, smooth, etc.)	Did the magnet attract the rock? (Yes / No)	Did the magnet stick to the rock? (Yes / No)	Could the magnet lift the rock? (Yes / No)	Other Notes
1.						
2.						
3.						
4.						
5.						
6.						

ANALYSIS QUESTIONS

1. Which rocks were attracted to the magnet?

   _____

2. Which rocks were not attracted?

   _____

3. What do you think causes some rocks to stick to a magnet?

   _____

4. Which rock(s) were easiest for the magnet to lift? Why?

   _____

CONCLUSION

Write 2–3 sentences explaining what you learned about magnets and iron-rich rocks.

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SCIENCE IS ALL AROUND YOU! Keep exploring, asking questions, and making discoveries.