

EXPLORING MAGNETS

1. Two identical bar magnets are kept on a table. One magnet suddenly turns and sticks to the other.

- i. Which poles must have come close together?**
- ii. What would happen if like poles were brought together?**
- iii. How can you identify the poles of an unknown magnet using a known magnet?**

2. A toy car moves without touching it when a magnet is brought near it.

- i. What can you infer about the material inside the toy car?**
- ii. Will the car move if the magnet is turned around? Explain.**
- iii. Can magnets work through thin cardboard or paper? Give a reason.**

3. A student cuts a bar magnet into two equal pieces.

- i. What will happen to the poles after cutting?**
- ii. Can a single north pole be obtained? Why or why not?**
- iii. Draw or explain what happens to the magnetic poles in both pieces.**