Name: _____ Date: _____

A Magnet Can Reach Through Paper

Circle group

Put a paper clip on a table. Slide a sheet of paper over it. Hold a magnet above the paper. The clip jumps up. It sticks to the paper from below! The magnet pulled it through.

A magnet has an area around it that you cannot see. It is the magnetic field. In this area, the magnet pulls on things made of iron and steel. A paper clip is made of steel. So the magnet pulls it.

Paper does not block the field. Thin plastic and cloth do not block it. A magnet can pull a clip through a thin cup.

The pull gets weaker when the magnet is far. Lift the magnet high above the paper. The clip stays put. The clip must be inside the field.

A magnet does not pull everything. It does not pull wood, paper, glass or most plastic.

Questions

1. What happens to the clip when you hold a magnet above the paper?

_____

_____

2. What is the area around a magnet called?

_____

_____

3. Which two metals does a magnet pull?

_____

_____

4. What happens to the pull when the magnet is far?

_____

_____

5. Why does the clip stay put if the magnet is far?

_____

_____

6. Which two things does a magnet not pull?

_____

_____

Words to know

magnet: a piece of metal that pulls on iron and steel
field: the space where a force can be felt
steel: a strong metal made mostly from iron

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

A Magnet Can Reach Through Paper

Triangle group

Put a paper clip on a table. Slide a sheet of paper over it. Now hold a magnet above the paper. The clip jumps up and sticks to the underside of the paper! The magnet pulled it right through.

A magnet has an invisible area around it called a magnetic field. Within that area, the magnet can pull on things made of iron and steel. A paper clip is made of steel, so the magnet pulls it.

Paper does not block the magnetic field. Neither does a thin piece of plastic or cloth. A magnet can pull a clip through a cup, as long as the cup is thin.

The pull gets weaker with distance. If you lift the magnet far above the paper, the clip stays put. The magnet has to be close enough for the clip to be inside its field.

Not everything is pulled by a magnet. Wood, paper, glass and most plastics are not attracted at all. A magnet can sort a pile of steel and wooden things in a flash.

Questions

1. What happens to the clip when you hold a magnet above the paper?

_____

_____

2. What is the area around a magnet called?

_____

_____

3. Which two metals does a magnet pull on?

_____

_____

4. What happens to the pull as the distance grows?

_____

_____

5. Why does the clip stay put if the magnet is far away?

_____

_____

6. Which two things does a magnet not pull?

_____

_____

Words to know

magnet: a piece of metal that pulls on iron and steel
invisible: not able to be seen
field: the space where a force can be felt
steel: a strong metal made mostly from iron
attracted: pulled toward something

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

A Magnet Can Reach Through Paper

Square group

Set a paper clip on a table, then slide a sheet of paper over it. Now hold a magnet above the paper. Astonishingly, the clip leaps upward and clings to the underside of the paper! The magnet has pulled it straight through.

Every magnet is surrounded by an invisible region called a magnetic field. Within that region, the magnet is able to pull on objects made of iron and steel. Because a paper clip is made of steel, the magnet attracts it.

Paper does not block the magnetic field, and neither does a thin sheet of plastic or a piece of cloth. A magnet can even pull a clip through a cup, provided that the cup is thin.

The strength of the pull fades as the distance grows. If you raise the magnet far above the paper, the clip will simply stay where it is, since the magnet must be close enough for the clip to lie within its field.

Not everything is attracted to a magnet. Wood, paper, glass and most plastics are not pulled at all. This allows a magnet to sort a pile of steel and wooden objects in a flash.

Questions

1. What happens to the clip when you hold a magnet above the paper?

_____

_____

2. What is the invisible region around a magnet called?

_____

_____

3. Which two metals can a magnet pull on?

_____

_____

4. What happens to the pull as the distance grows?

_____

_____

5. Why does the clip stay where it is if the magnet is far away?

_____

_____

6. Which two things does a magnet not pull?

_____

_____

Words to know

magnet: a piece of metal that pulls on iron and steel
invisible: not able to be seen
field: the space where a force can be felt
steel: a strong metal made mostly from iron
attracted: pulled toward something

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

For the teacher: A Magnet Can Reach Through Paper

Each student sheet carries a shape, not a level. The same topic and facts, written three ways.

Circle: A Magnet Can Reach Through Paper

Easier · 144 words · Flesch-Kincaid grade 2

1. It jumps up and sticks to the paper from below.
2. The magnetic field.
3. Iron and steel.
4. It gets weaker.
5. The clip is not inside the magnetic field.
6. Wood and glass, or paper, or most plastic.

Triangle: A Magnet Can Reach Through Paper

This passage · 175 words · Flesch-Kincaid grade 3.6

1. It jumps up and sticks to the underside of the paper.
2. A magnetic field.
3. Iron and steel.
4. It gets weaker.
5. The clip is not inside the magnetic field.
6. Wood and glass, or paper, or most plastics.

Square: A Magnet Can Reach Through Paper

Harder · 194 words · Flesch-Kincaid grade 5.7

1. It leaps upward and clings to the underside of the paper.
2. A magnetic field.
3. Iron and steel.
4. It fades and gets weaker.
5. The clip does not lie within the magnetic field.
6. Wood and glass, or paper, or most plastics.