Practice Question Set For GCSE
Subject : Physics
Paper-2 Topic :12_Magnetism And The Motor Effect

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Name of the Student:_____
Max. Marks : 21 Marks **Time : 21 Minutes**

Q1.

Figure 3 shows some objects and words describing these objects.

Draw one line from each object to its description.

(2)

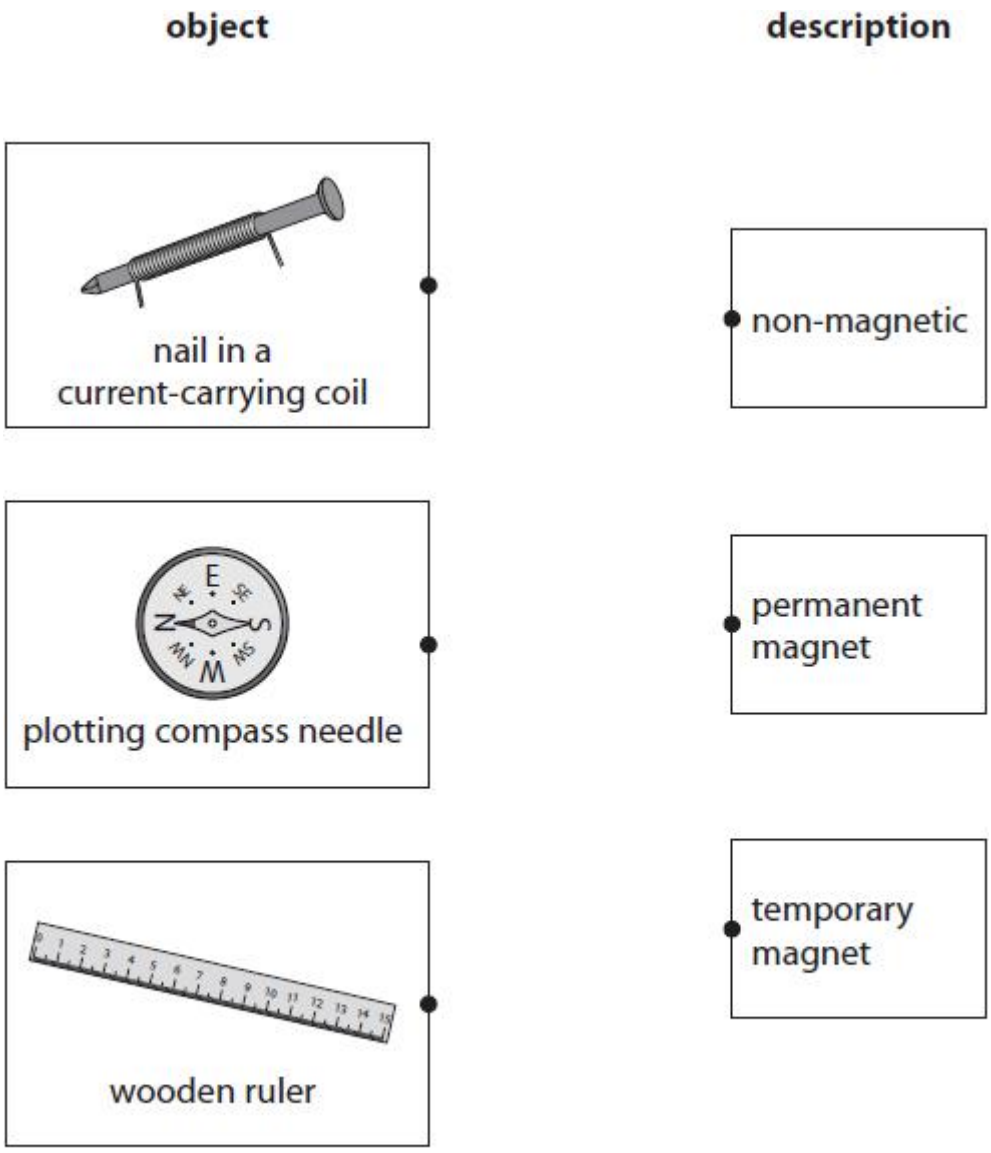

Figure 3

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(Total for question = 2 marks)

Q2.

Figure 3 shows two magnetic poles facing each other.

The magnetic field between the poles is uniform.

On Figure 3, draw the magnetic field lines between the two poles and show the direction of this magnetic field.

(3)

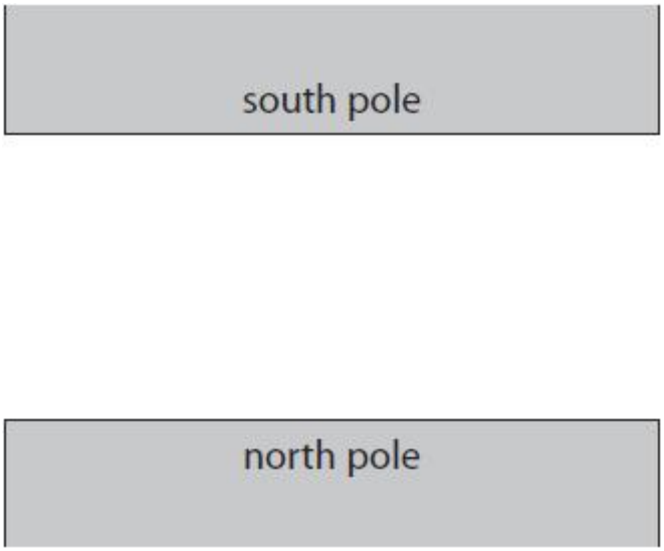

Figure 3

(Total for question = 3 marks)

Q3.

Figure 6 shows a part of a machine used to separate steel cans from aluminium cans.

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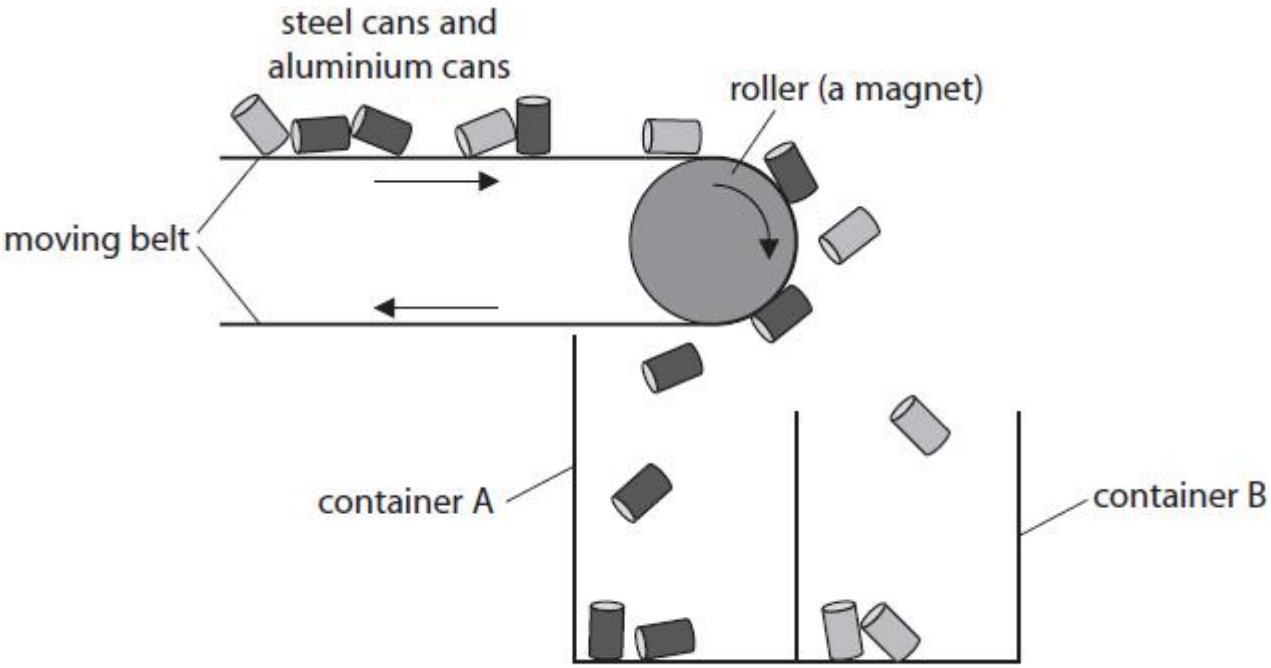

Figure 6

The cans are carried along a moving belt.

The belt goes around a roller.

The roller is a magnet.

Each can falls into one of the containers.

Explain how this machine separates the steel cans from the aluminium cans.

(2)

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(Total for question = 2 marks)

Q4.

Answer the question with a cross in the box you think is correct (☒). If you change your mind about an answer, put a line through the box (☒) and then mark your new answer with a cross (☒).

A student is given two permanent magnets and some paper clips, as shown in Figure 4.

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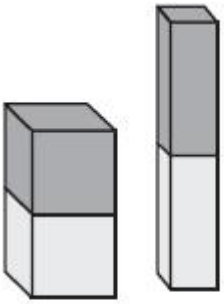
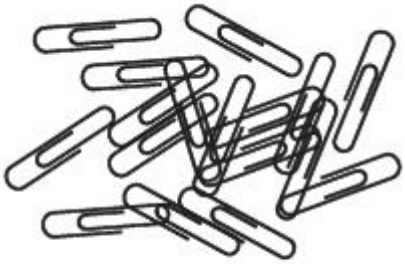


two permanent magnets



paper clips

Figure 4

The paper clips are **not** magnets, but they are made from a magnetic material.

(i) Which of these is a magnetic material?

(1)

- ☒ **A** aluminium
- ☒ **B** iron
- ☒ **C** plastic
- ☒ **D** wood

(ii) Describe how the student could use the paper clips to find out which of the two permanent magnets is the stronger magnet.

(2)

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(Total for question = 3 marks)

Q5.

Answer the question with a cross in the box you think is correct ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

Which of these is a magnetic material?

(1)

- ☒ **A** aluminium
- ☒ **B** carbon
- ☒ **C** cobalt
- ☒ **D** copper

(Total for question = 1 mark)

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Q6.

Three of the following are magnetic materials.

Which of these is **NOT** a magnetic material?

(1)

- ☒ **A** cobalt
- ☒ **B** copper
- ☒ **C** iron
- ☒ **D** nickel

(Total for question = 1 mark)

Q7.

This question is about magnets and magnetism.

Figure 3 shows a magnet that has picked up three paper clips.

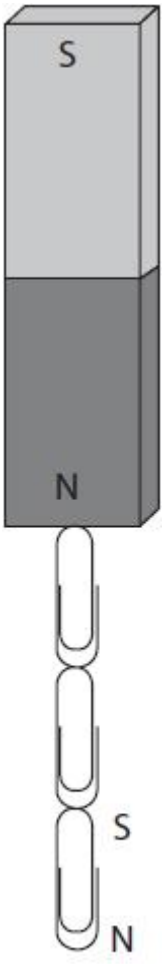

Figure 3

(i) The poles of the lowest paper clip are labelled.

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Label the poles of the other two paper clips in Figure 3.

(2)

(ii) Complete the sentence, by choosing a word from the box, to describe the type of magnetism that these paper clips have.

(1)

alternated	earthed	induced	transformed

These paper clips have ..... magnetism.

(iii) Suggest a material that these paper clips in Figure 3 could be made from.

(1)

.....

(iv) When the paper clips were pulled off the magnet they fell separately to the table.

Describe how you could test whether any of the paper clips had kept any magnetism.

(2)

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(Total for question = 6 marks)

Q8.

Figure 4 shows the magnetic field produced by a current in a long, straight wire.

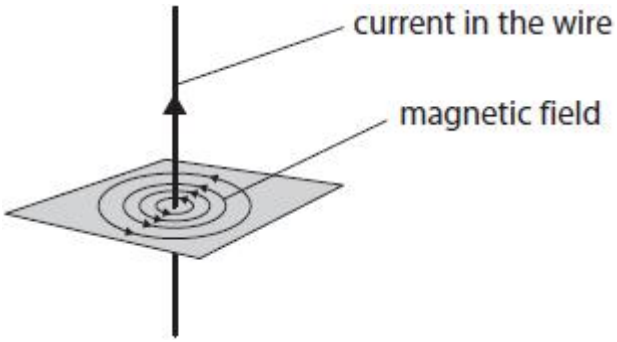

Figure 4

Which row of the table is correct when the strength of the magnetic field is greatest?

(1)

	distance from the wire	current
☒ A	small	small
☒ B	small	large
☒ C	large	small
☒ D	large	large

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(Total for question = 1 mark)

Q9.

Figure 5 shows a magnet holding some paper clips.

Figure 5

Describe how a student could show that the paper clips are induced magnets.

(2)

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(Total for question = 2 marks)

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