

(Finite and renewable resources)

Q1. (2018)

Carpets are made from:

- poly(propene)
- wool
- a mixture of poly(propene) and wool.

Poly(propene) wears out more slowly than wool.

A mixture of poly(propene) and wool to make carpets is more sustainable than using just poly(propene) or just wool.

Suggest why.

[2 marks]

Q2. (2019)

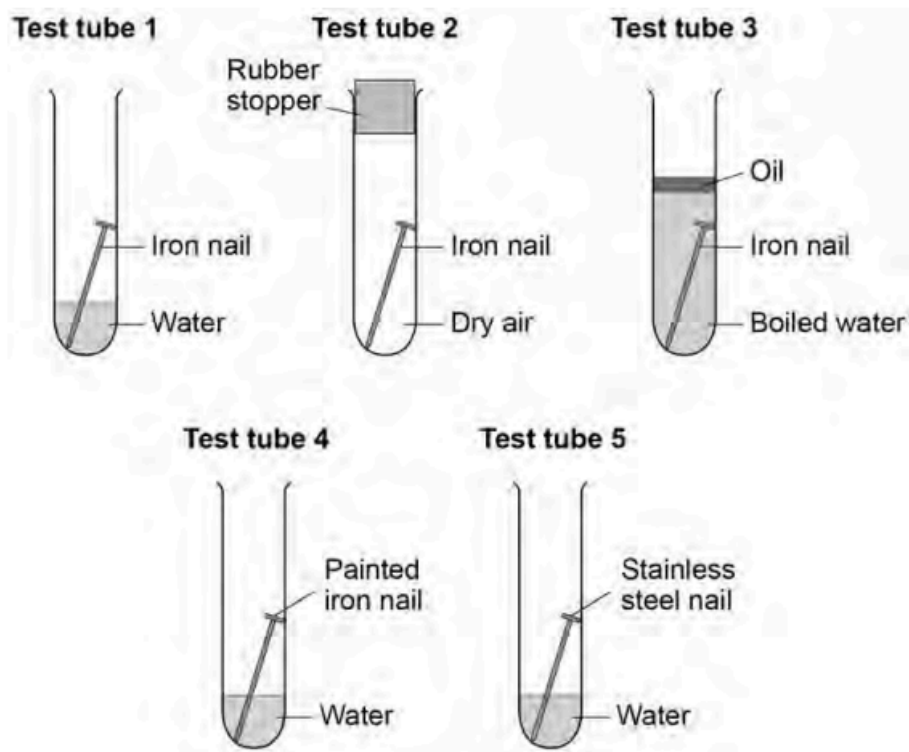
This question is about the corrosion of metals.

The corrosion of iron is called rusting.

A student investigated the rusting of iron.

This is the method used.

1. Set up the test tubes as shown in **Figure 4**.
2. Leave the test tubes for 1 week.
3. Examine the nails for signs of rust.

Figure 4

Explain what would happen to the nails in each of the test tubes.

[5 marks]

Magnesium is fixed to some steel ships.

Explain how this prevents the steel from rusting.

[2 marks]

Q4. (2019)

Explain why aluminium window frames do **not** corrode after they are made.

[2 marks]

Q5. (2019)

This question is about combustion of fuels.

Some central heating boilers use wood as a fuel.

Suggest **two** reasons why wood is more sustainable than natural gas as a fuel for central heating boilers.

[2 marks]

1

2

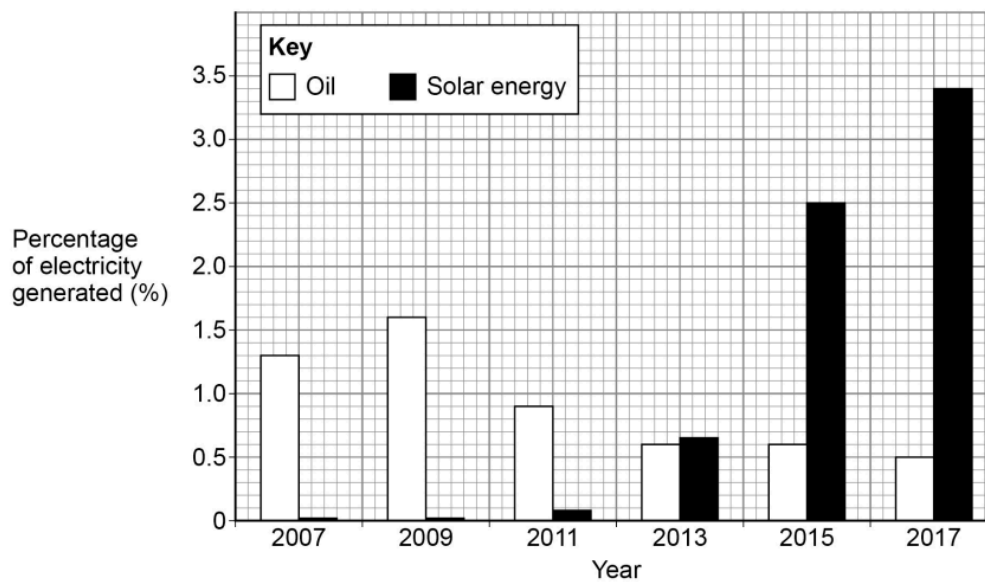
Q6. (2021)

This question is about fuels and energy.

Figure 1 shows the percentage of electricity generated in the UK between 2007 and 2017 using:

- oil
- solar energy.

Figure 1



Describe the changes in the percentage of electricity generated in the UK between 2007 and 2017 using:

- oil
- solar energy.

Use data from **Figure 1** in your answer.

[3 marks]

Q7. (2021)

Suggest **one** reason why using solar energy is a more sustainable way of generating electricity than burning oil.

[1 mark]

Q8. (2021)

Solar energy may **not** be able to replace the generation of electricity from fossil fuels completely.

Suggest **two** reasons why.

[2 marks]

1 _____

2 _____
