

Answers

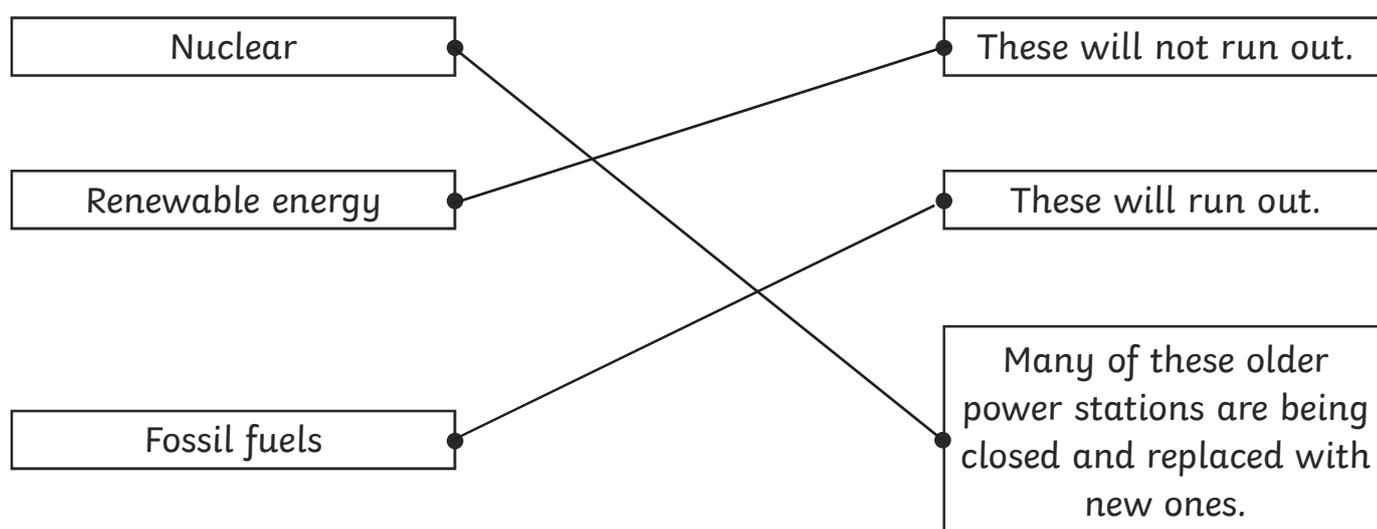
1. Which of the following is not powered by electricity? Tick one.

- hair dryer
- radio
- bicycle**
- All of the above

2. Find and copy one word that means 'made'.

generated

3. Draw **three** lines to match each energy source with each fact.



4. Tick the boxes to say whether the statements below are **true** or **false**.

Statement	true	false
Oil is a renewable source of energy.		✓
Electricity generated from renewable energy sources causes less pollution than electricity generated from fossil fuels.	✓	
All electricity is generated in nuclear power stations.		✓

5. How does electrical charge get to where it needs to be used? Tick one.

- it travels through air particles
- it flows through wires**
- it is transported by car
- it travels through the ground

6. Fill in the missing words.

Electricity can be generated in power stations, **wind turbines** and solar panels.

7. Electrical current flows more easily through silver, copper, and gold. Which material do you think is most often used for electrical wires? Explain your answer using evidence from the text.

Pupils' own responses, such as: I believe that electrical wires are most often made out of copper because it says that electrical current flows more easily through copper, silver and gold. I think copper is less expensive than silver and gold, so copper would probably be used more than those.

Answers

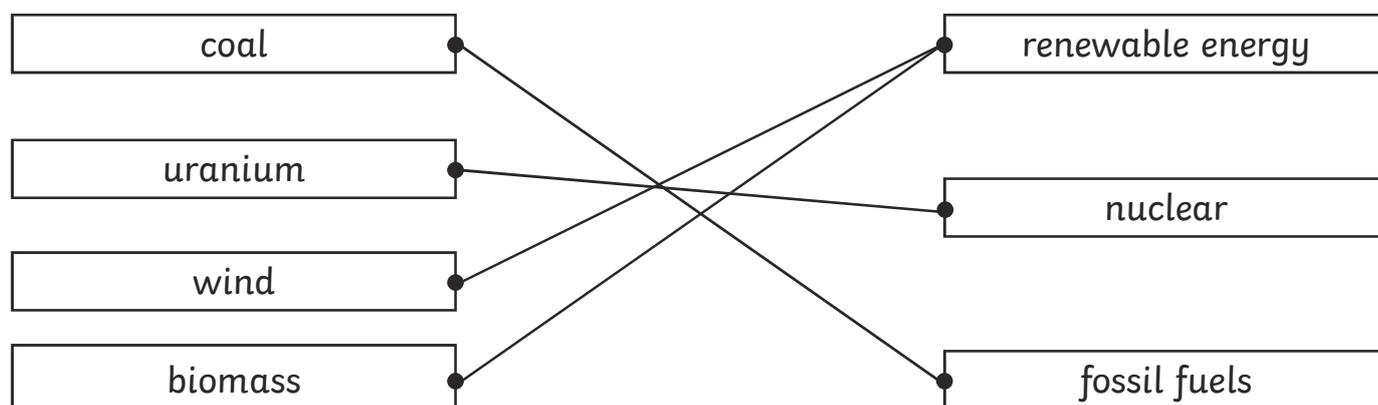
1. What is electricity? Tick one.

- the movement of charged particles**
- when charged particles stop
- when particles vibrate
- when particles **change state**

2. Find and copy **three** materials that allow an electrical current to move more easily.

- **silver**
- **copper**
- **gold**

3. Draw **four** lines and to match each energy source to its type.



4. Fill in the missing words.

Electrical charge flows through a complicated grid of wires called the **national grid**, to get to where it needs to be used, like in homes, hospitals and factories.

5. Number the facts from **1-5** to show the order in which they appear in the text. The first one has been done for you.

4	Electricity can be generated in power stations, through wind turbines and solar panels.
3	The energy from these sources is harvested through different technologies, for example, wind turbines.
1	Many things are powered by electricity.
5	Electricity can be very dangerous as you can get an electric shock from it.
2	Most power stations burn the fossil fuel natural gas, but some also use coal.

6. What is electrical current measured in? Tick one.

- amps**
- centimetres
- grams
- wattage

7. Which material do you think is used most regularly for electrical purposes? Explain your answer using evidence from the text.

Pupils' own responses, such as: I believe that electrical wires are most often made out of copper because it says in the text copper, silver and gold are good electrical conductors. As copper is less expensive than silver and gold, I think it would probably be used most often.

8. Compare renewable energy sources and fossil fuels in 40 words or fewer.

Pupils' own responses, such as: Renewable energy sources are sources such as wind and sun, they do not run out and generating electricity with them does not create pollution. Fossil fuels are burned to make electricity and this causes pollution, they can also run out.

Answers

1. What is electricity?

Electricity is the movement of charged particles through a wire.

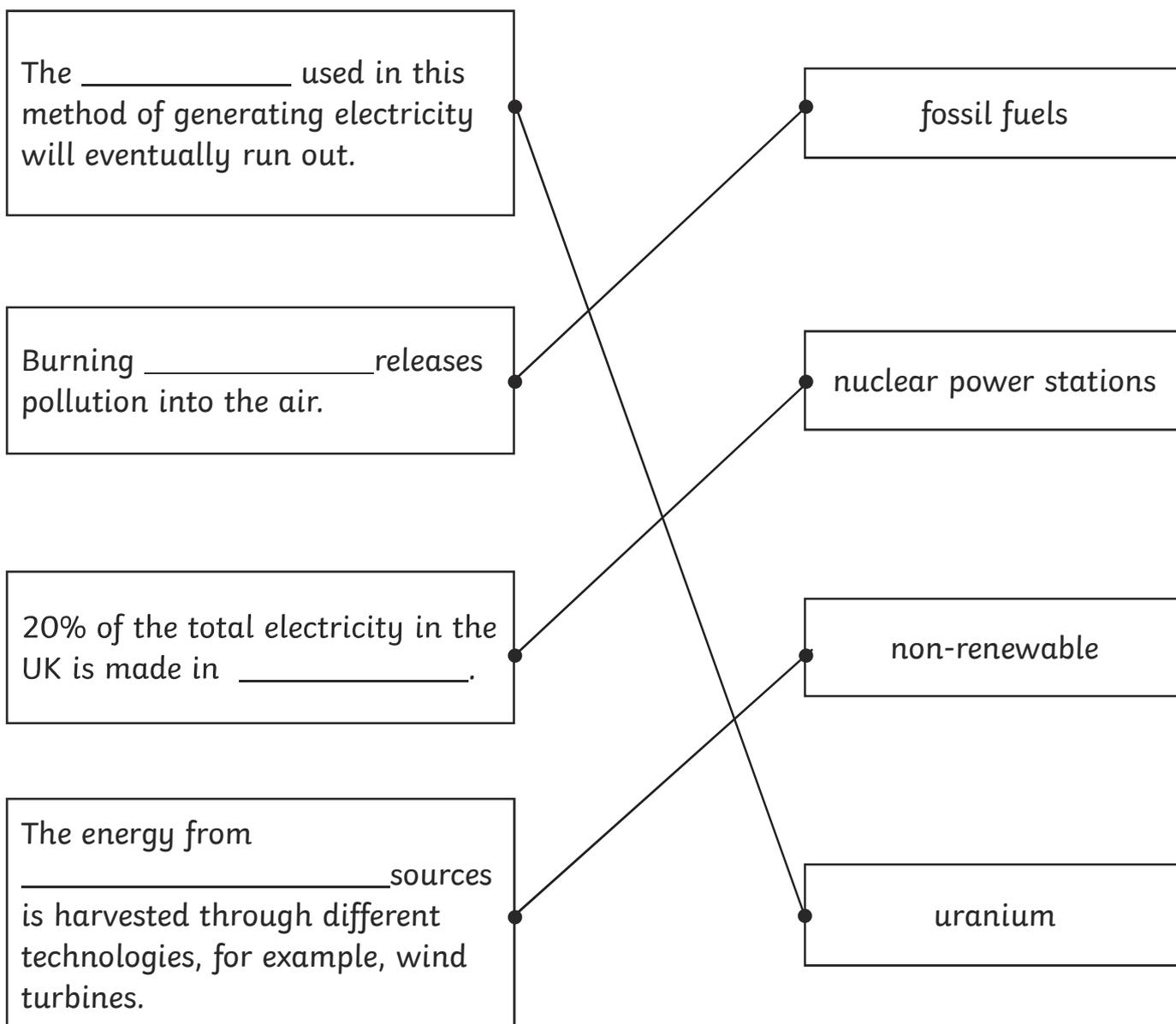
2. Fill in the missing words.

Most power stations burn the **fossil** fuel natural gas, but some also use **coal**.

3. 'Hydro' is an example of what type of energy?

Renewable energy

4. Draw **four** lines to match each sentence with the missing words.



5. How many nuclear reactors are there in the UK? Tick one.

- 15
- 25
- 20
- 10

6. What are the positives and negatives of Nuclear energy?

Pupils' own responses, such as: The positive for nuclear energy is that it is a cleaner source of energy as generating electricity in this way doesn't involve burning fuels so it doesn't cause air pollution. The negative for using nuclear energy is that it causes nuclear waste and uses uranium, this is non-renewable and will eventually run out.

7. Which type of energy do you think is most sustainable and why?

Pupils' own responses, such as: I believe the most sustainable form of energy is renewable energy. This is because both fossil fuels and uranium, used in nuclear energy, will run out.

8. Electricity is less than 100 years old.

Is this true or false? Explain how you know using evidence from the text.

Pupils' own responses, such as: This fact is false because the text says that Michael Faraday invented the first electric motor in around 1821, which is almost 200 years ago. Electricity must have been invented before this.