

Cross-curricular extension unit 1

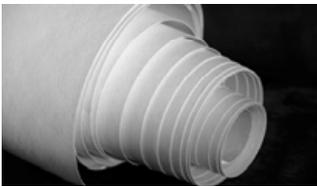
Technology: Production stages

1 Match the raw materials 1–7 with the definitions a–g.

- | | |
|----------|--------------------------------------------------|
| 1 ore | a a yellow or white material you find on a beach |
| 2 fleece | b it's usually green, sometimes with flowers |
| 3 plant | c the coat of some animals, e.g. sheep |
| 4 tree | d the liquid from plants |
| 5 oil | e many of these make a forest |
| 6 sand | f a rock with metal in it |
| 7 sap | g a black liquid we take from the ground |

2 Label the pictures with the basic materials in the box.

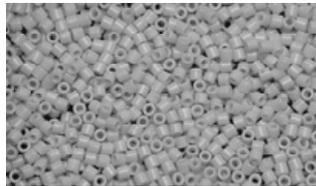
cotton glass metal paper plastic rubber wool



1 _____



2 _____



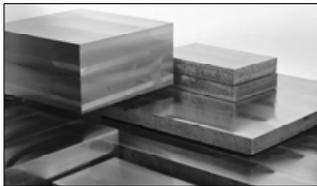
3 _____



4 _____



5 _____



6 _____

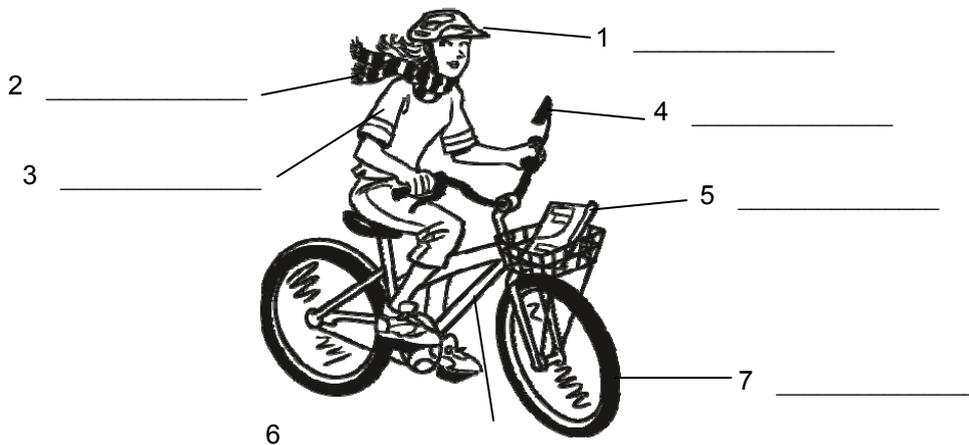


7 _____

3 Complete the sentences with the raw material words in exercise 1.

- | | |
|-------------------------------|----------------------------------------------------------|
| 1 Glass is made from _____. | 5 Rubber is made from the _____ of some tropical plants. |
| 2 Plastic is made from _____. | 6 Cotton is made from a _____. |
| 3 Paper is made from a _____. | 7 Many types of metal are found in an _____. |
| 4 Wool is made from _____. | |

4 Label the finished products with the basic material words in exercise 2.



2 _____

3 _____

1 _____

4 _____

5 _____

6 _____

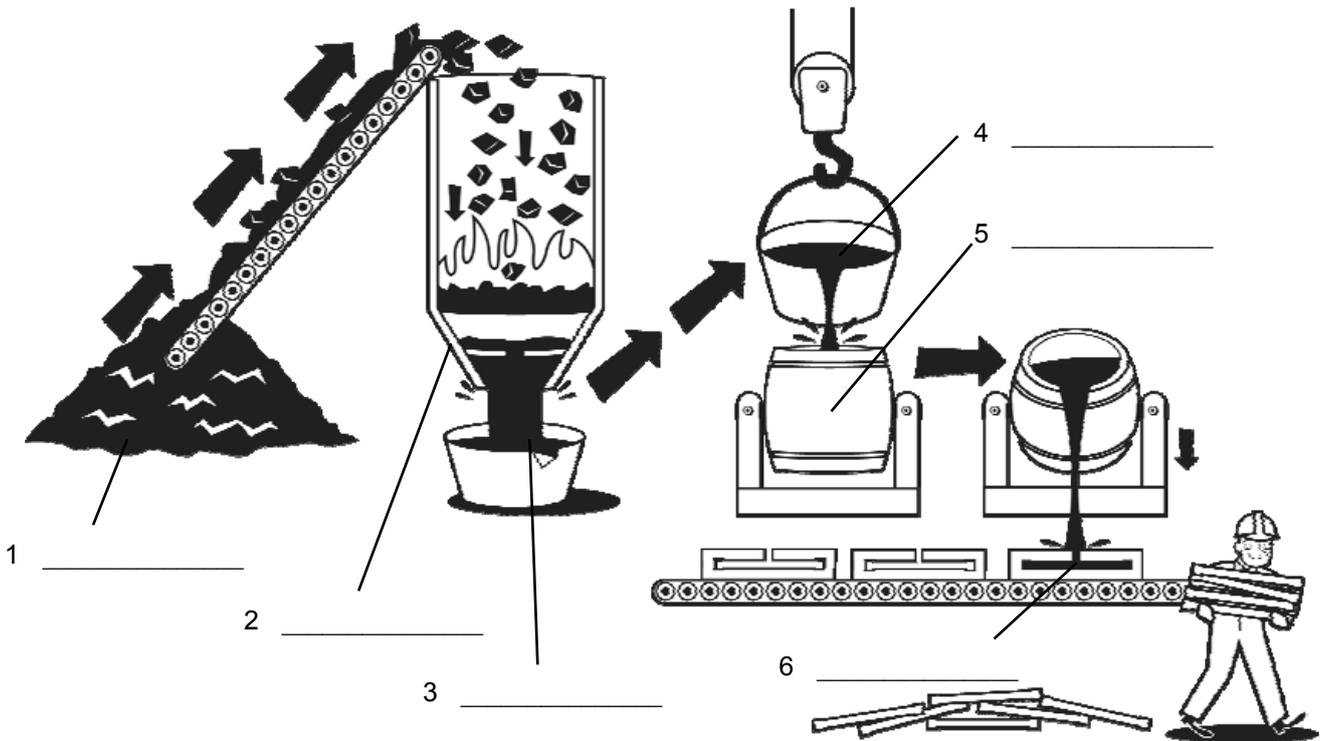
7 _____

5 Read the text quickly. Does it describe the production stages for metal, plastic or paper?

Iron and steel

We don't often use materials in their raw state. We change the raw materials to make the things we use every day. The plastic in our water bottles and mobile phones comes from oil. The paper in books comes from trees, and the metal we use comes from a rock called an ore.

How do we get the metal for the girl's bike? We find iron in a rock called iron ore. We put the iron ore in a very big oven called a blast furnace. When the furnace is very hot, the metal in the ore changes into a liquid and comes out of the rock. The melted iron then goes into a different oven called a steel furnace. In this oven we make a metal called steel. It is stronger than iron. Next we put the liquid steel into a mould. A mould gives the steel a shape. For the bike we need a mould that makes tube shapes. When it is cold, we have the frame for the bike. This is the finished product.



6 Label the diagram above with the words in the box.

blast furnace iron ore melted iron pour into moulds put liquid into second oven steel furnace

7 Read the text again and write *True* or *False* for sentences 1–6. Correct the false sentences.

- 1 We usually change the raw materials before we use them. _____
- 2 Iron ore is a rock with metal in it. _____
- 3 The furnace doesn't need to be very hot. _____
- 4 There are three ovens in this process. _____
- 5 Iron is stronger than steel. _____
- 6 We use moulds to make the shapes we need. _____

8 Do some research on the internet or in an encyclopaedia. Find out and then describe how we make plastic bottles.