Name _____ **Date** _____

Worksheet 3.2

Sedimentary rocks and fossils

Concrete

Every modern building uses concrete in its construction. Concrete is very hard and strong. The underground base of a building or **foundations** are made of concrete. The **slab** or floor of the building is made of concrete. Paving slabs and many bricks are also made of concrete.

Concrete is a mixture of **cement**, crushed stone, sand, water and air:

Crushed stone: 41%; sand: 26%; cement: 11%; water: 16%; air: 6%

Cement is made from crushed limestone and shells. It sets and hardens when mixed with water. The crushed stone is often igneous rock which is very hard and strong. Sand consists of quartz which is a very hard mineral.

As soon as water is added the concrete begins to **set**. This is why concrete is often delivered in trucks like the one in the picture. The concrete is continuously turned in the concrete mixer on the back of the truck so that it mixes but does not set. When the truck arrives at the building site, the concrete is poured directly where it is needed.

Questions

1 Explain the meaning of:

a foundations

_____

b slab

_____

c cement

_____

d set

_____

2 Fill in the substances used to make concrete:

Cement + _____ + _____ + _____ + _____

3 Describe how sedimentary and igneous rocks are made into concrete.

_____

_____

4 Why is concrete so strong?

_____

_____

5 Draw a bar graph to show the percentages of different substances used to make concrete.

Help sheet

1 Find each word in **bold** in the text.

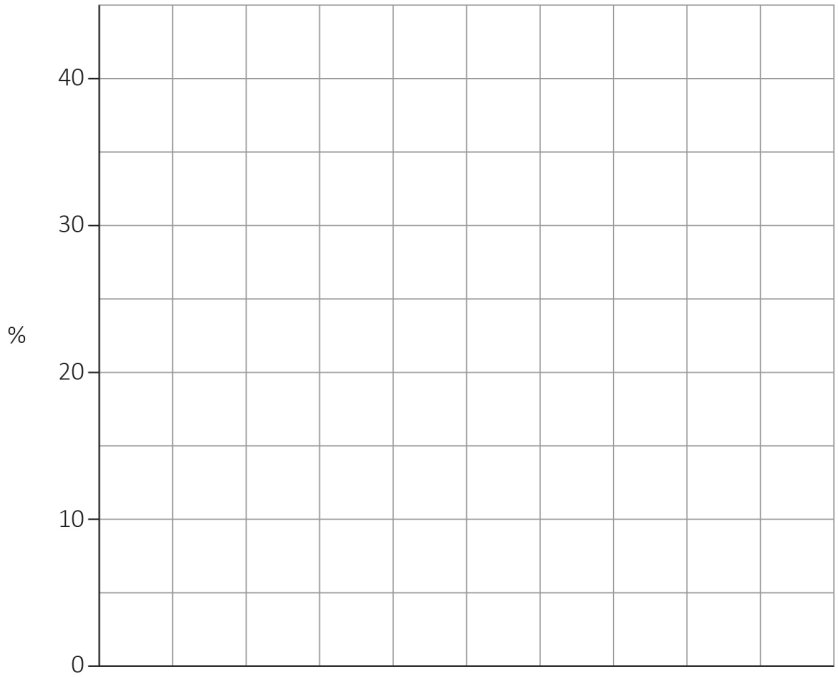
For example: The underground base of a building or **foundations** are made of concrete.
This tells you that foundations are the underground base of a building.

3 Look for examples of sedimentary rock and igneous rock in the text.

For example: cement is made of crushed limestone and shells.
Limestone is a sedimentary rock.

5 Remember that when you draw a bar graph, you need to look at the largest number (which will give the longest bar) to work out a suitable scale. Use these axes.

Remember to label the axis, label each bar and give the bar graph a heading.



Name _____ **Date** _____

Stretch questions

6 How is mortar different to concrete? What is mortar used for?

_____

_____

_____

7 Visit a building site. Find out answers to the following questions.

- What do the builders use concrete for?
- Where do the builders get their concrete from?
- What mixture do the builders use to make mortar?

Bring your information to share with the class.