

Science

The parts of a plant - roots and stems

Book: The Plant Book

Pages 6-9

**Students: Fill in the answers and return for assessment**

Everything here is based on our Curriculum Visions book The Plant Book.

In this segment, we are going to learn about roots and stems.

**You will need to go to pages 6-7 of the book.**

Part 1

What is the difference between a tap root and fibrous roots? Draw a picture of each.

**Answer ...**

**A tap root is a thick, central root. It grows downwards. Fibrous roots are thin and of a similar size; the ends are covered in root hairs.**

Part 2

What are the jobs of roots in a plant?

**Answer ...**

**To take in water and nourishment, to store water and food, (they may also add: to help the plant cling to walls or other surfaces).**

Part 3

Why do gardeners take cuttings of plants with roots all along their stems?

**Answer ...**

**The cutting will grow new roots and turn into a new plant.**

**Now turn to pages 8-9 of the book.**

Part 4

What are three roles of the stem?

Answer ...

To hold a plant upright, to take up water and food, to store water and food.

## Part 5

What is the difference between stalks and trunks? Name one kind of plant with a stem and one with a trunk.

Answer ...

Stalks are held upright by fibres and are stringy and strong. They are held up by the water inside them and easily bend when the water dries out. Trunks are made of strong wood, they are less flexible but do not bend when the soil dries out.

## Part 6

If your teacher agrees, place some stalks of celery into a glass of coloured water for a few hours. Can you see the parts of the celery where water is transferred up the stem? Why is this important?

Answer ...

It is important because this is how water, and food that is dissolved in the water, is transferred around the plant.

That is the end of this worksheet, and you can now turn to another one. Also, find out if your teacher has left you any other worksheets or special instructions on your school website.

If you are interested in this topic, continue to browse the book and watch our amazing videos. They start right on the book cover.

Or you may want to see related books. If so just go to the top of the screen, select science, and from the page that opens choose The Plant Book.