Science

How new plants are made Book: The Plant Book

Pages 20-27

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 how new plants are formed from seeds, spores and stems.

You will need to go to pages 20-21 of the book.

Part 1

In your own words, or using a drawing, give the life cycle of a conifer.

What are two kinds of plants that have spores?

Answer ...

Sample answer: A conifer tree produces male and female cones. Pollen from the male cone is released into the air and fertilises a female cone. The female cone produces seeds which are released from the cone and form new plants.

Plants with spores include mosses, ferns and fungi

Now turn to pages 22-23 of the book.

Part 2

Give three examples of ways that seeds may be scattered.

Answer ...

They may be carried by the wind, by animals or by water

Now turn to pages 24-25 of the book.

Part 3

Describe the process of germination.

## Answer ...

The seed takes in water and oxygen. The plant uses stored food to begin growing. It sends out a root to take in water. As the plant grows larger, the seed coat splits, eventually the shoot emerges. The shoot grows and the leaves begin to unfurl, supplying food.

Now turn to pages 26-27 of the book.

## Part 4

Complete the chart below about stems that produce new plants. The first one has been done for you.

	Runners	Underground Stems	Bulbs	Corms
What is it?	Side buds on roots			
How does a new plant form?	New buds grow at intervals along the runner			
Example of a plant that grows using this method	Buttercup			

## Answer ...

	Runners	Underground Stems	Bulbs	Corms
What is it?	Side buds on roots	Stems that grow horizontally through the soil	A short stem surrounded by leaves	A short, thick stem swollen with food

How does a new plant form?	New buds grow at intervals along the runner	The stem stores food. When it is broken an identical new plant forms using the food.	Bulbs separate from the parent and form new plants.	Side buds produce new shoots, these make new corms
Example of a plant that grows using this method	Buttercup	Iris	Daffodil, tulip, hyacinth	Crocuses, gladioli

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.