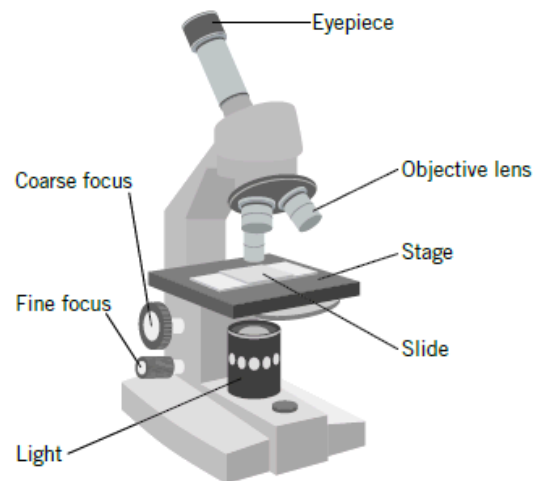


## Cells

### Task 1: Using a microscope

In this task you will revise how to use a microscope to **observe a cell**. You will write a full **explanation** of how to do this.

You need to complete the table first. Make sure you use the key words given.



| Step | What do you need to do? | Why do you need to do it? | Key words                               |
|------|-------------------------|---------------------------|---|
| 1    |                         |                           | slide                                   |
| 2    |                         |                           | stage                                   |
| 3    |                         |                           | light                                   |
| 4    |                         |                           | objective lens<br>high<br>magnification |
| 5    |                         |                           | coarse-focus                            |
| 6    |                         |                           | fine-focus                              |

Now decide the best way to write your explanation. You should include all the information that is in the table. Write your explanation in the space below.

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### Task 2: Describing cells

On the left, write down everything you know about cells.

Use the information you have written to write a full description.

**What I know about cells:**

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**My description of a cell:**

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### Task 3: Comparing cells

Write a full description of what each cell component does in the table below.

In the right-hand column, write if you think it is found in plant cells only, or plant and animal cells. This will help you in the next part of the task.

| Component     | Description | Which type of cell? |
|---------------|-------------|---------------------|
| nucleus       |             |                     |
| cell wall     |             |                     |
| chloroplast   |             |                     |
| cytoplasm     |             |                     |
| cell membrane |             |                     |
| vacuole       |             |                     |
| mitochondria  |             |                     |

### Description of the similarities and differences of plant and animal cells:

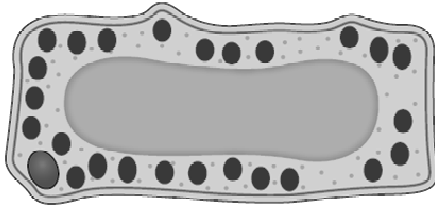
(Similarities) Both plant and animal cells have \_\_\_\_\_

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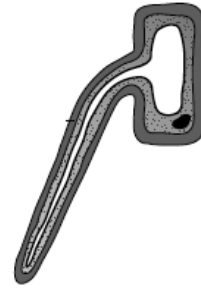
(Differences) Plant cells are different to animal cells. They also contain \_\_\_\_\_

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### Task 4: Describing specialised cells



**Plant cell**



**Root hair cell**

A root hair cell is a type of specialised plant cell.

What is its job?

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Describe how it looks different to a plant cell.

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How do you think these differences help it to carry out its job?

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### Task 5: Describing diffusion

You are going to describe the process of diffusion. You should use the words in the box in your description. The words are in the order you need to use them. Remember, 'concentration' means the number of particles in one place.

**movement**

**particles**

**high concentration**

**low concentration**

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### Task 6: Unicellular organisms

Draw a diagram of two different unicellular organisms. Label your diagrams and give the name and a brief description of each component of the unicellular organisms.

Diagram tips:

- Use a sharp pencil.
- Think about the components each one has and draw them clearly.
- Label your diagrams.