

# Lesson 7 - Animal cells

## (Downloadable student document)

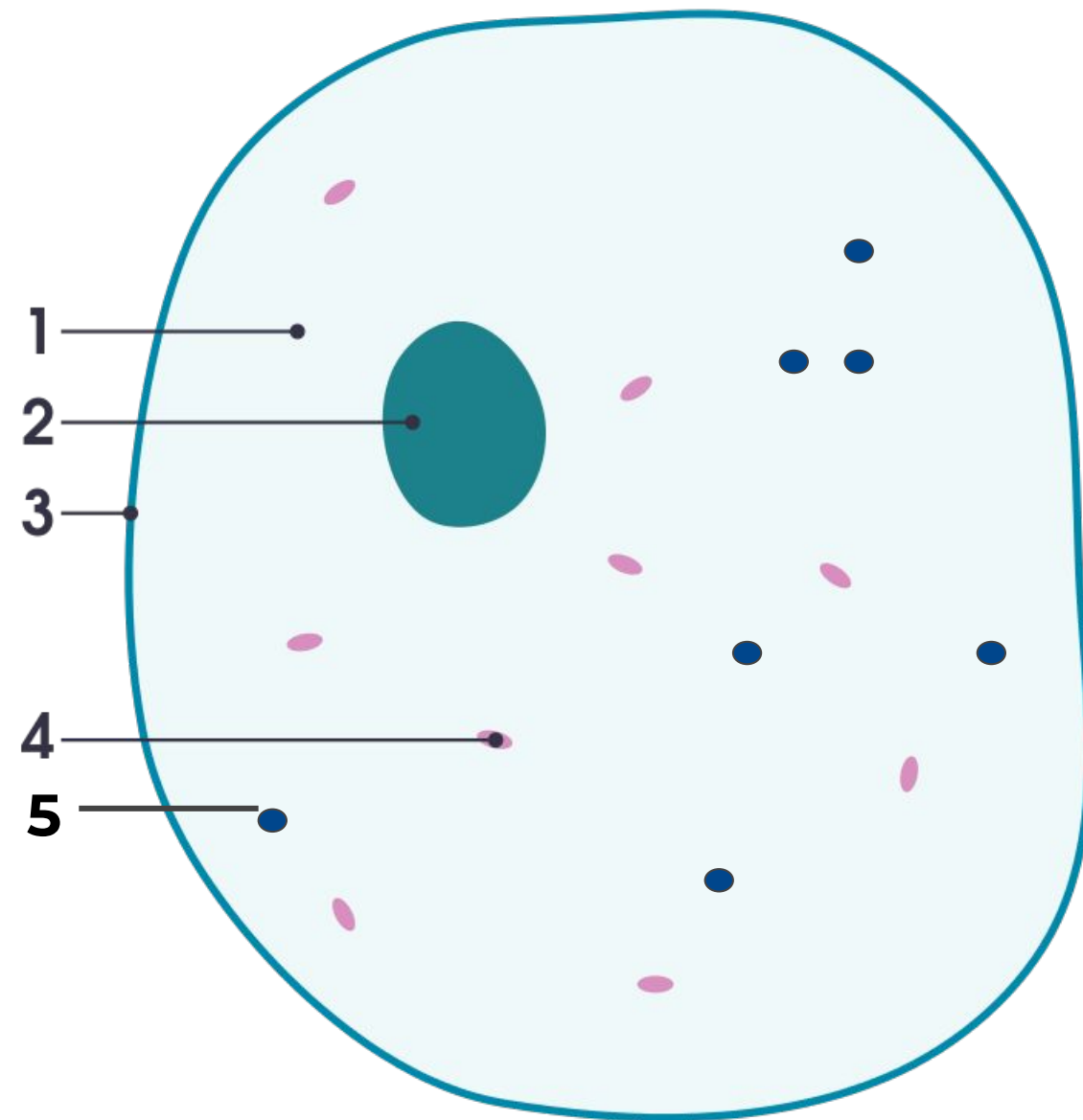
Science - Biology - Key Stage 3

Cells, Tissues and Organs

Miss Wickham



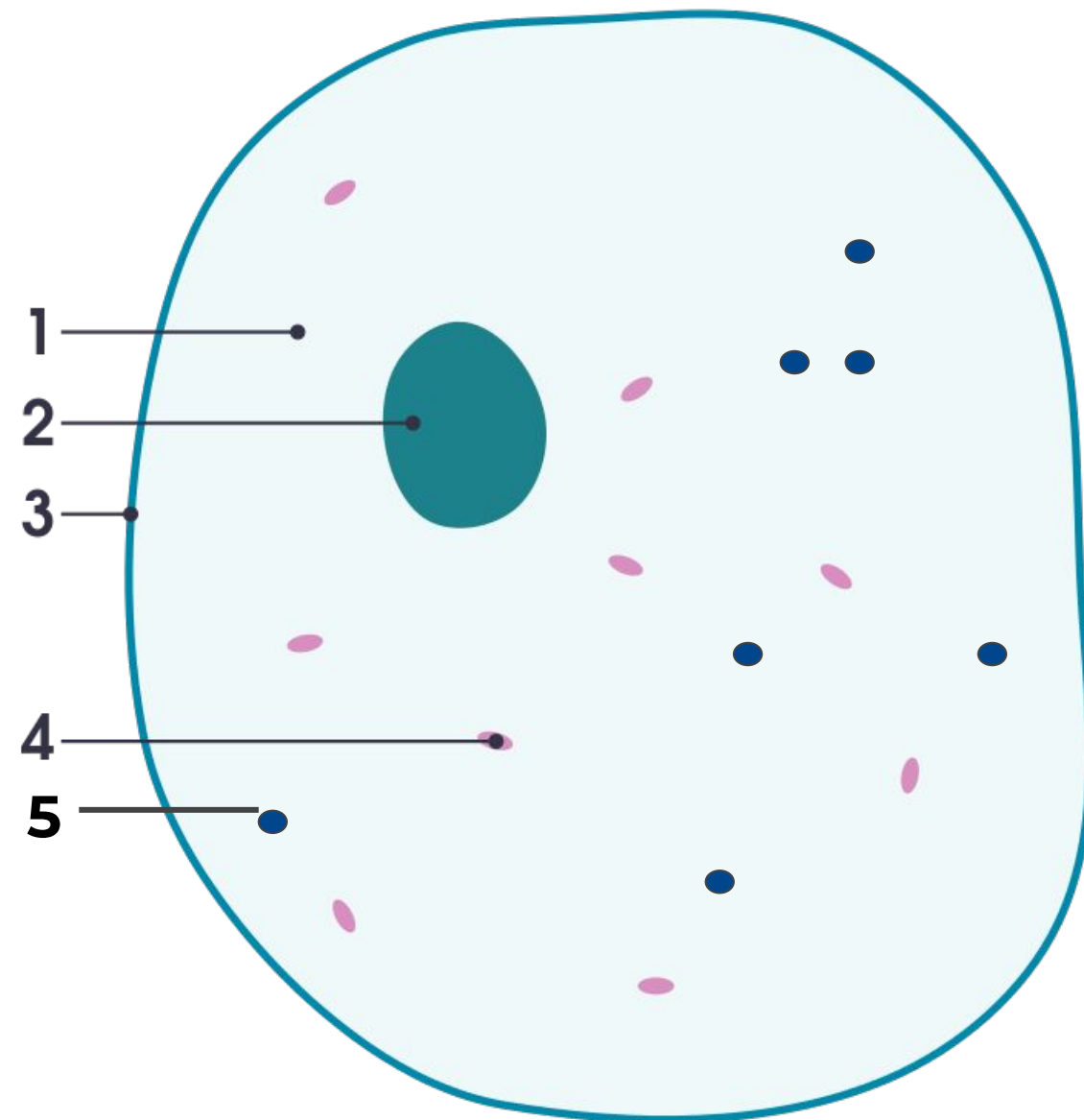
# Task - label the organelles in the animal cell and describe their function



**Key words: nucleus, cytoplasm, ribosomes, mitochondria, cell membrane**



# Mark your answers

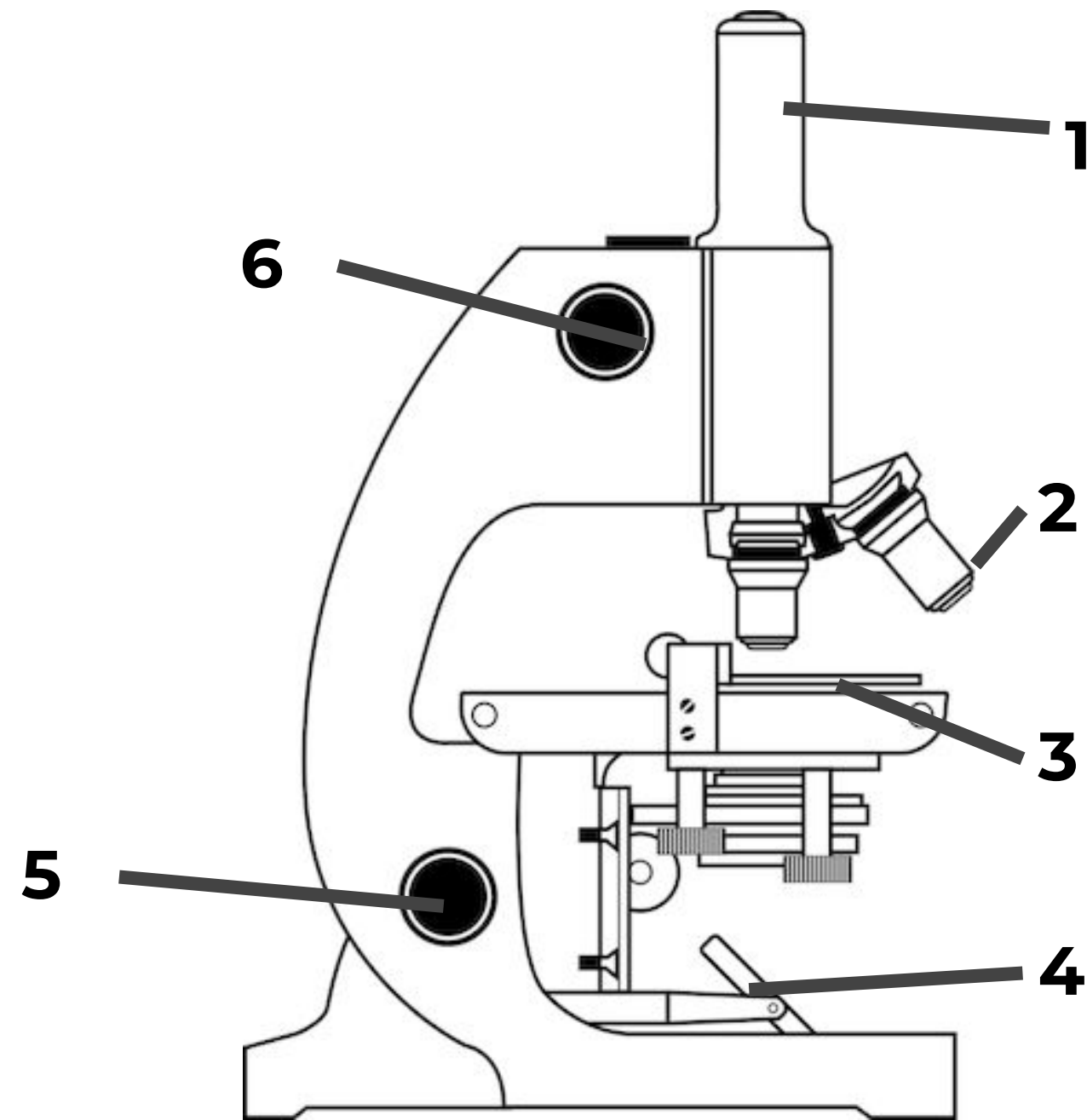


- 1. Cytoplasm** - the jelly like-substance where chemical reactions take place
- 2. Nucleus** - contains genetic information and controls the activities of the cell
- 3. Cell membrane** - controls the substances entering and leaving the cell
- 4. Mitochondria** - where respiration happens
- 5. Ribosomes** - where protein synthesis takes place

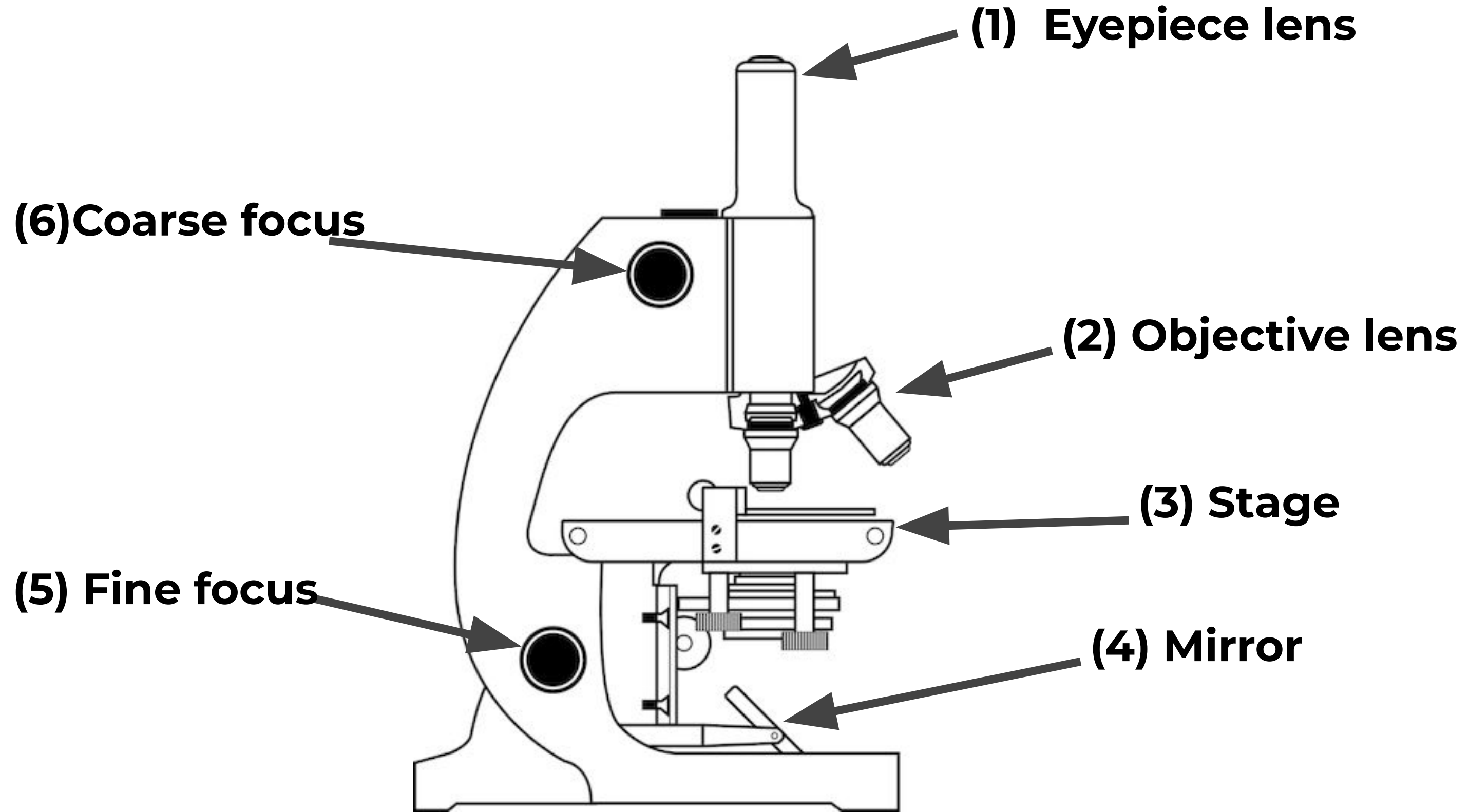


# Recap on microscopes

Label the parts of the microscope using these keywords: **eyepiece lens**, **mirror**, **objective lens**, **coarse focus**, **stage**, **fine focus**



# Recap on microscopes



# Calculating magnification

**Magnification = image size ÷ actual size**

A plant cell in a photograph measures 15 mm across. If the actual size of the cell is 0.015 mm, what is the magnification in the photograph?



# Calculating magnification

**Magnification = image size ÷ actual size**

An animal cell photograph measures 30 mm across. If the actual size of the cell is 0.003 mm, what is the magnification in the photograph?



**A student places an individual animal cell and plant cell under a microscope. They are confused how to identify which one is which. Explain to the student how you can identify each type of cell.**

The plant cell can be identified as it has...

The animal cell is different to the plant cell because..

Key words: organelles, structure, chloroplasts, vacuole, cell wall





**A student places an individual animal cell and plant cell under a microscope. They are confused how to identify which one is which. Explain to the student how you can identify each type of cell.**

The plant cell can be identified as it has 3 extra organelles than an animal cell; a vacuole, cell wall and chloroplasts.

The animal cell is different to the plant cell because it is more round and irregular in shape. Plant cells are more rectangular and regular in shape.

Plant cells and animal cells both have a cell membrane, nucleus, cytoplasm, ribosomes and mitochondria.

