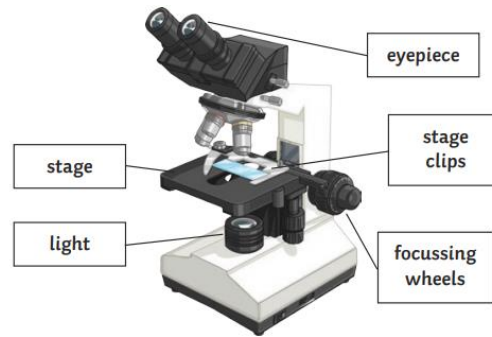
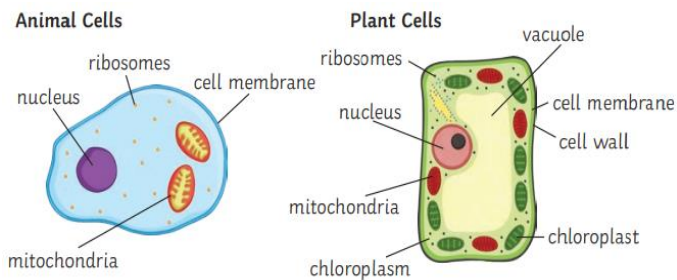
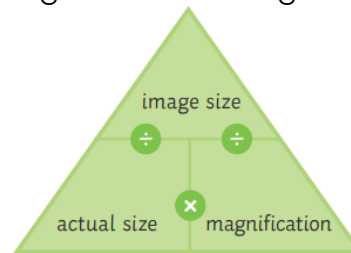


Key Facts - 7A- Cells

1. Cell – the basic unit which living things are made from
2. Cell membrane - controls what goes into and out of a cell
3. Cytoplasm - substance inside a cell where the chemical reactions happen
4. Nucleus - contains the DNA.
5. Mitochondria - Site of aerobic respiration, which releases energy.
6. Chloroplast - site of photosynthesis, which produces glucose. Contains green chlorophyll.
7. Cell wall - helps to support the plant cell
8. Vacuole- stores nutrients in plant cells
9. Ribosomes- site of protein production.
10. Animal cells contain: nucleus, cell membrane, cytoplasm, mitochondria and ribosomes
11. Plant cells contain the same as animal cells, plus: vacuole, cell wall, chloroplasts

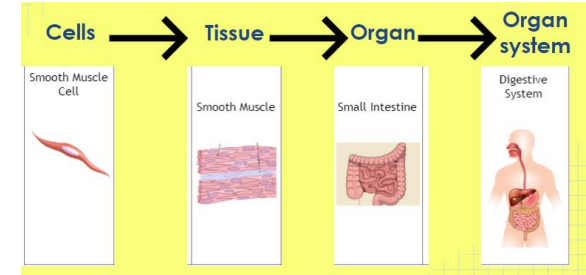


12. Carry the light microscope by the base and the arm.
13. Use the lowest objective lens first.
14. Place the slide you want to look at on the stage.
15. Look at the image using the eyepiece lens. Use the focusing wheels to focus the image.
16. Magnification = image size ÷ actual size



17. Humans are multicellular. We are made of lots of different cells.
18. Multicellular organisms need specialised organ systems to carry out a function.
19. Organ system- Collection of organs working together to do a very important function
20. Organ- A large part of a plant or animal that has a very important function. It is made from different tissues

21. Tissue- A group of the same cells all working together
22. Cell - The basic unit which living things are made from
23. From smallest to largest: Cell, Tissue, Organ, Organ System, Organism



24. Some cells are specialised for a function (job). They are differentiated.
25. Sperm cells have a tail to swim to the egg. They have lots of mitochondria to release energy to swim.
26. Muscle cells have lots of mitochondria to release energy to move.
27. Nerve cells are long to carry electrical impulses around the body.
28. Red blood cells do not have a nucleus. They have more space to carry oxygen.
29. Ciliated cells have a large surface area to move mucus.
30. Root hair cells have a large surface area to absorb water.
31. Palisade cells have lots of chloroplasts for photosynthesis.