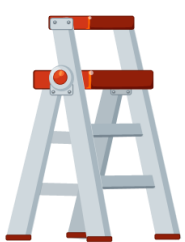
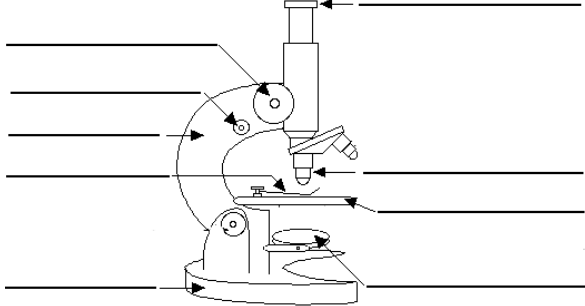
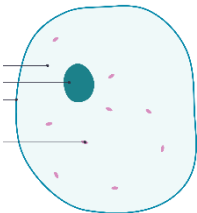
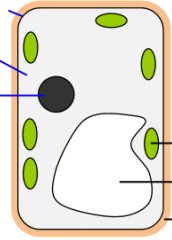
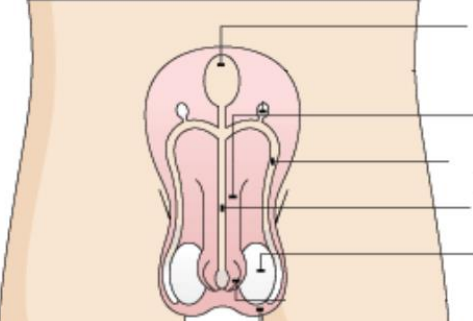
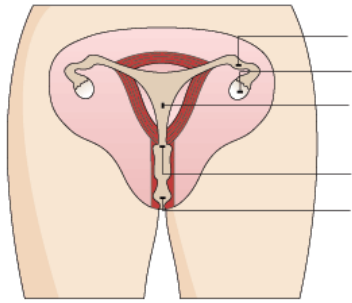


%	I can ...	Prove it!									
	<ul style="list-style-type: none"> • Link variation to genetic and environmental factors (MM4) • Apply knowledge of genetic cross diagrams to predict whether individuals will inherit genetic diseases (MM4) 	<p>1) Lizzy and Rena are identical twins. Can you explain why they don't look EXACTLY the same?</p> <p>2) Samantha and Michael are planning on having a child. Samantha and Michael are both carriers for a recessive disease called Cystic Fibrosis. Can you work out what the chances of them having a child with Cystic Fibrosis is? Show your working.</p> <p>3) For each of the 6 specialised cells, explain how they are adapted to carry out their function. e.g. a sperm cell has a flagellum (tail), this is so it can swim to the egg cell for fertilisation.</p>									
	<ul style="list-style-type: none"> • Link adaptations of specialised cells to their function (MM2) • Explain what is found within a nucleus (MM1) • Explain how characteristics are passed on from parents to offspring (MM4) • Describe how a baby develops during pregnancy (MM4) • Complete genetic cross diagrams (MM4) 	<p>1) Miss Clark is telling Miss Hunt about specialised cells. State 4 of the specialised cells and for each one give 2 ways in which it is adapted to its function.</p> <p>2) Miss Mitchell is telling Class D that there are no differences or similarities between plant and animal cells. Explain why she is wrong. Include the following key terms:</p> <table border="0" style="width: 100%; text-align: center;"> <tr> <td>Cell wall</td> <td>Cell membrane</td> <td>Vacuole</td> </tr> <tr> <td>Mitochondria</td> <td>Cytoplasm</td> <td>Nucleus</td> </tr> <tr> <td></td> <td></td> <td>Chloroplast</td> </tr> </table> <p>3) Miss Hamilton is expecting a baby and she really wants a boy! Work out the chance of her offspring being a boy, using a punnet square.</p> <p>4) A midwife is visiting from St Thomas'. She has asked you to summarize the development of a baby in 5 key points. Can you do it?</p> <p>5) Having blue eyes is a recessive gene. Miss Clark's mum has brown eyes (Bb) and Miss Clark's dad has blue eyes. Can you work out the likelihood that Miss Clark will have blue eyes?</p>	Cell wall	Cell membrane	Vacuole	Mitochondria	Cytoplasm	Nucleus			Chloroplast
Cell wall	Cell membrane	Vacuole									
Mitochondria	Cytoplasm	Nucleus									
		Chloroplast									
	<ul style="list-style-type: none"> • Describe how to safely change magnification and focus a microscope (MM1) • Explain the function of the main components of an animal and plant cell (MM2) • Link individual organs to their organ systems (MM4) • Describe the process of fertilisation (MM6) 	<p>1) Miss Bowen wants to increase the magnification on a skin cell. Explain how she can do this and how to make the image clearer.</p> <p>2) A group of children are visiting from Johanna. Write one sentence to explain to them the function of each of the following components:</p> <ol style="list-style-type: none"> Nucleus Cell wall Cell membrane Vacuole Chloroplast Cytoplasm Mitochondria <p>3) Which organ systems do the following organs belong to?</p> <ol style="list-style-type: none"> Heart Small intestine Uterus Brain <p>4) Can you explain what fertilisation is (include where it happens and what cells are involved)?</p>									



%	I can ...	Prove it!																																
	<ul style="list-style-type: none"> Identify the main components of an animal cell and a plant cell (MM1) Identify differences in the males and female gametes (MM3) Link specialised cells to their functions (MM3) 	<p>1) Which of these components is found in an animal cell? Which are found in a plant cell? Nucleus Cell wall Cell membrane Vacuole Chloroplast Cytoplasm Mitochondria</p> <p>2) Can you give 2 differences between the male and female gametes?</p> <p>3) Link the specialised cell to its function</p> <table border="1" data-bbox="919 549 1138 926"> <tr><td>Sperm Cell</td></tr> <tr><td>Ovum Cell</td></tr> <tr><td>Red Blood Cell</td></tr> <tr><td>Root hair cell</td></tr> <tr><td>Palisade cell</td></tr> <tr><td>Ciliated Cell</td></tr> </table> <table border="1" data-bbox="1486 549 1843 926"> <tr><td>To trap dust in the airways</td></tr> <tr><td>To transport oxygen around the body</td></tr> <tr><td>To carry the male DNA</td></tr> <tr><td>To carry the female DNA</td></tr> <tr><td>To absorb sunlight for photosynthesis</td></tr> <tr><td>To absorb water and nutrients</td></tr> </table> <p>4) Put these words in order of complexity starting with 'cell': cell, organism, organ, system, tissue.</p>	Sperm Cell	Ovum Cell	Red Blood Cell	Root hair cell	Palisade cell	Ciliated Cell	To trap dust in the airways	To transport oxygen around the body	To carry the male DNA	To carry the female DNA	To absorb sunlight for photosynthesis	To absorb water and nutrients																				
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	<ul style="list-style-type: none"> Label the parts of a microscope (MM1) Label the sub-cellular structures in a cell (MM1) Identify the different organ systems and their main function (MM2) Identify the main cells involved in reproduction (MM3) Use key terms to label the parts of a reproductive system (MM3) 	<p>1) Label the parts of the microscope</p> <table border="1" data-bbox="926 1121 1352 1323"> <tr><td>Eye piece</td><td>Course-focussing wheel</td></tr> <tr><td>Light/mirror</td><td>Arm</td></tr> <tr><td>Fine focussing wheel</td><td>Stage clips</td></tr> <tr><td>Stage</td><td>Base</td></tr> <tr><td>Lens</td><td></td></tr> </table>  <p>2) Label the cells below</p>   <p>2) Can you match the organ system to their function in the body?</p> <table border="1" data-bbox="957 1694 1955 2012"> <thead> <tr> <th>Organ System</th> <th>Function</th> </tr> </thead> <tbody> <tr> <td>Circulatory system</td> <td>Breaks down food so that it can be absorbed by the body</td> </tr> <tr> <td>Skeletal system</td> <td>Sends electrical messages around the body</td> </tr> <tr> <td>Reproductive system</td> <td>Supports the structure of the body</td> </tr> <tr> <td>Respiratory system</td> <td>Produces sperm and eggs and provide space for a baby to develop</td> </tr> <tr> <td>Nervous system</td> <td>Adds oxygen to the blood and removes carbon dioxide</td> </tr> </tbody> </table> <p>3) Can you name the two main cells involved in reproduction?</p> <p>4) Can you add the labels to the reproductive system?</p> <table border="1" data-bbox="947 2178 1927 2273"> <tr> <td>Bladder</td> <td>Urethra</td> <td>Testis</td> <td>Sperm duct</td> <td>Oviduct</td> </tr> <tr> <td>Ovary</td> <td>Vagina</td> <td>Cervix</td> <td>Uterus</td> <td>Penis</td> </tr> </table>  	Eye piece	Course-focussing wheel	Light/mirror	Arm	Fine focussing wheel	Stage clips	Stage	Base	Lens		Organ System	Function	Circulatory system	Breaks down food so that it can be absorbed by the body	Skeletal system	Sends electrical messages around the body	Reproductive system	Supports the structure of the body	Respiratory system	Produces sperm and eggs and provide space for a baby to develop	Nervous system	Adds oxygen to the blood and removes carbon dioxide	Bladder	Urethra	Testis	Sperm duct	Oviduct	Ovary	Vagina	Cervix	Uterus	Penis
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Key Terms:

- Variation
- Cells
- Tissues
- Organs
- Organ systems
- Organisms
- Focus
- Nucleus
- Chloroplasts
- Mitochondria
- Chlorophyll
- Cell wall
- Cell membrane
- Vacuole
- Root hair cell
- Ciliated cell
- Red blood cell
- Gamete
- Sperm cell
- Ovum
- Specialized
- Reproduction
- Puberty
- Menstrual Cycle
- Ovulation
- Fertilisation
- Conception
- Embryo
- Placenta
- Umbilical cord
- Contract
- Hormone
- Chromosomes
- Alleles
- Dominant
- Recessive
- Genes

