

Name:
Science Class:
Teacher:
Hand in day:

Y7 Science

Term 3: Homework Booklet

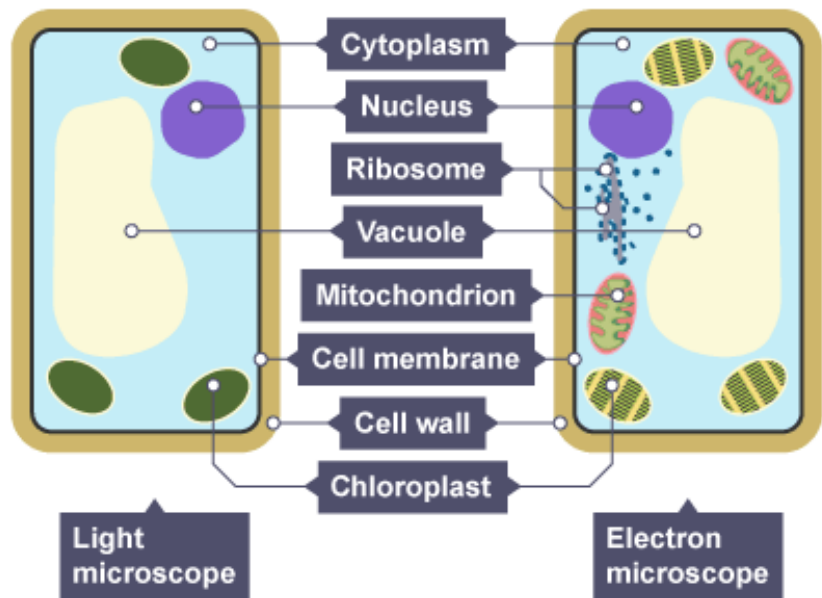
Biology

	Hand in Date	Parents Signature
Plant Cells and Plant Reproduction		
Homework 1		
Homework 2		
Homework 3		
Homework 4		

Plants Homework 1:

Read through the information then answer the questions below:

Plant cells



Animal and plant cells have certain structures in common:

	Function
Cytoplasm	A jelly-like material that contains dissolved nutrients and salts and structures called organelles. It is where many of the chemical reactions happen.
Nucleus	Contains genetic material, including DNA, which controls the cell's activities.
Cell membrane	Its structure is permeable to some substances but not to others. It therefore controls the movement of substances in and out of the cell.
Mitochondria	Organelles that contain the enzymes for respiration, and where most energy is released in respiration.
Ribosomes	A tiny organelle where protein synthesis occurs.

Plant cells also have additional structures:

	Function
Chloroplast	Organelles that contains the green pigment, chlorophyll, which absorbs light energy for photosynthesis. Contains the enzymes needed for photosynthesis.
Cell wall	Made from cellulose fibres and strengthens the cell and supports the plant.
Permanent vacuole	Filled with cell sap to help keep the cell turgid.

Questions

1. List the five structures that both plant and animal cells have.

2. List the three structures that only plant cells have.

3. In which structure does protein synthesis occur?

4. In which structure is DNA found?

5. What is the cell wall made from?

6. What is the function of the cell wall?

7. In which structure is chlorophyll found?

8. What does chlorophyll absorb and why?

9. What is the function of the cell membrane?

10. What is the function of the mitochondria?

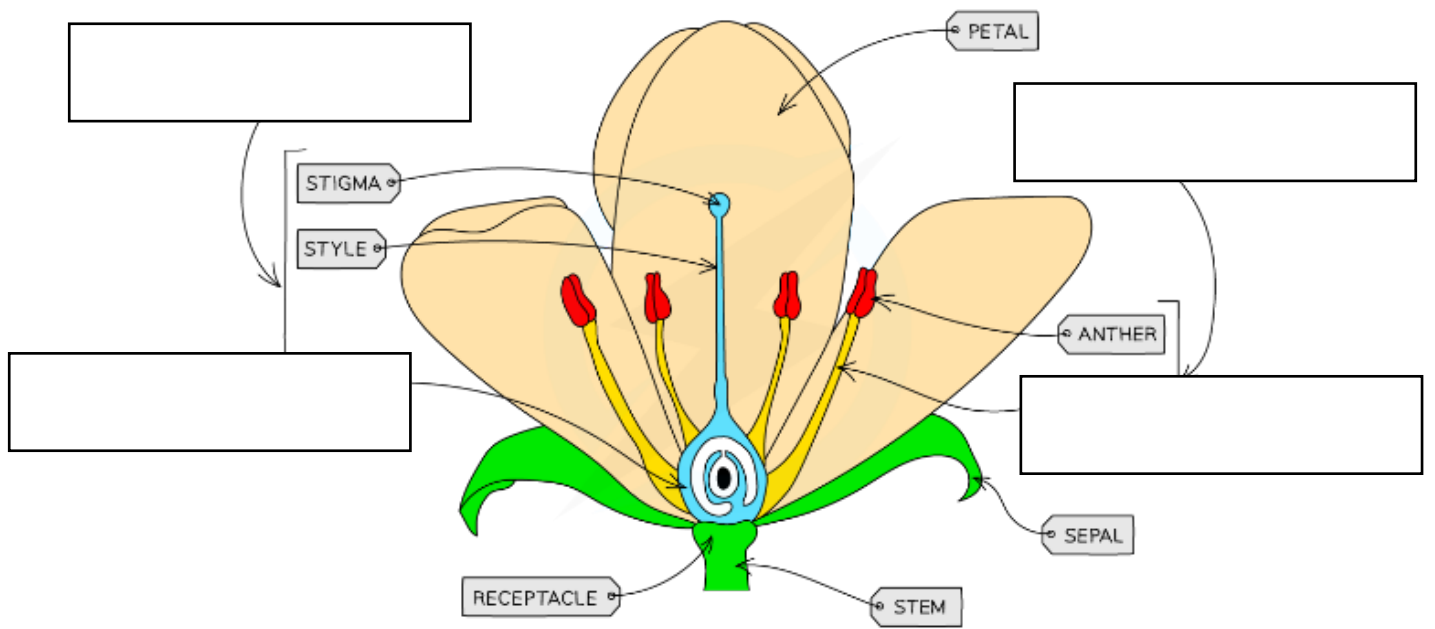
Plants Homework 2:

Complete the table below. Use the knowledge organiser to help.

Type of Structure	What role do they have in a plant?	How are they adapted?
Root Hair Cell		
Palisade Cell		
Xylem Vessels		
Phloem Vessels		

Plants Homework 3:

Label the missing structures then describe the role of each part of the flower in the table.



Structure	Function
Petals	
Anthers	
Stigma	
Ovary	

Plants Homework 4:

Part 1

Use the knowledge organiser to help you answer the questions below:

1. What is the definition of pollination? (1 mark)

2. In which two ways can pollen be transferred? (2 marks)

3. What is meant by fertilisation? (1 mark)

4. Why is it important that seeds are dispersed? (1 mark)

5. Give three ways in which seeds can be dispersed (3 marks)

1. _____

2. _____

3. _____

(Total 8 marks)

Part 2

Use the space below to draw a mind map for this topic. Use the knowledge organiser to help and start with the areas you feel less confident with (you do not have to cover everything but use all the space).