Name:	
Science Class:	
Teacher:	
Hand in day:	

Y9 Science Term 3: Homework Booklet Biology

	Hand in Date	Parents Signature
GCSE Transition Topic		
Homework 1		
Homework 2		
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Homework 3		
Homework 4		

GCSE Topic: 1. Cell Biology

Homework 1

https://www.my-gcsescience.com/aqa/biology/eukaryotic-and-prokaryotic-cells/

Watch the video 'Eukaryotic and Prokaryotic Cells' then answer the questions below:

- 1. List the components of an animal cell.
- 2. In which part of a cell is the genetic material found?
- 3. Where does aerobic respiration take place in a cell?
- 4. Where are proteins made in a cell?
- 5. Which extra features do plant cells have?
- 6. Which substance are cell walls made of?
- 7. What is the name of the pigment found in chloroplasts?
- 8. What is the role of chlorophyll?
- 9. Are plant cells smaller or bigger than animal cells?
- 10. Animal and plant cells are eukaryotic cells. What does this mean?

GCSE Topic: 1. Cell Biology

Homework 2

https://www.my-gcsescience.com/aqa/biology/specialised-cells/

Watch the video 'Specialised Cells' then answer the questions below:

- 1. List the features that most animal cells will have.
- 2. What is the role of a nerve cell?
- 3. What is the role of dendrites on a nerve cell?
- 4. What is the role of a sperm cell?
- 5. What two adaptations does a sperm cell have to help it swim to an egg cell?
- 6. What is the role of root hair cells?
- 7. How are root hair cells adapted to increase absorption?
- 8. What do xylem cells transport in a plant?
- 9. What is the role of lignin in xylem tubes?
- 10. What do phloem cells transport in a plant?

GCSE Topic: 2. Organisation

Homework 3

https://www.my-gcsescience.com/aga/biology/the-circulatory-system/

Watch the video 'The Circulatory System' then answer the questions below:

- 1. What is the circulatory system made up of?
- 2. What are the four components of the blood?
- 3. Which type of blood cells carries oxygen?
- 4. Why do red blood cells not have a nucleus?
- 5. Name two substances that can be carried in the plasma.
- 6. What is meant by a double circulatory system?
- 7. What are the upper most chambers of the heart called?
- 8. What are the purpose of valves in the heart?
- 9. Which blood vessel takes blood away from the heart to the lungs?
- 10. Which blood vessel takes blood away from the heart to the body?

GCSE Topic: 4. Bioenergetics

Homework 4

https://www.my-gcsescience.com/aqa/biology/photosynthesis/

Watch the video 'Photosynthesis' then answer the questions below:

- 1. What is the word equation for photosynthesis?
- 2. What is the chemical symbol for carbon dioxide?
- 3. How does carbon dioxide enter the plant?
- 4. How does water enter the plant?
- 5. What is the chemical symbol for glucose?
- 6. Oxygen is a waste product of photosynthesis. How does it leave a plant?
- 7. Photosynthesis is an endothermic reaction. It has to take in energy. Where does this energy come from?
- 8. What is the name of the green pigment in plant cells that is able to absorb this energy?
- 9. In which part of a plant cell is chlorophyll found?
- 10. The glucose made in photosynthesis can be used to make cellulose. What does plant use cellulose for?