GCSE Biology Learning Checklist

Unit 1: Organisation	Sub-unit: Organisation in animals and plants

I can...		After Lesson	After Revision
1	Name the components of blood.		
2	Describe the structure and function of red blood cells, white blood cells and platelets.		
3	Recognise the different types of blood cells in a photograph or diagram.		
4	Explain how the structure of arteries, veins and capillaries relate to their function.		
5	Explain the importance of valves.		
6	Explain the importance of a double circulatory system.		
7	Name and identify the four chambers of the heart.		
8	Describe the structure and functions of the heart.		
9	Describe what happens to the coronary arteries in coronary heart disease and explain how this affects the heart muscle.		
10	Describe how stents are used to treat coronary heart disease.		
11	Describe how statins are used to treat coronary heart disease.		
12	Describe how heart valves may become faulty and explain the consequences of faulty heart valves.		
13	Describe how faulty heart valves can be replaced using biological or mechanical valves.		
14	Describe how a donor heart, or heart can be transplanted in the case of heart failure.		
15	Explain when an artificial heart might be used.		
16	Evaluate the advantages and disadvantages of treating cardiovascular diseases by drugs (statins), mechanical devices (stents) or transplant		

17	Identify and label the components of the human gas exchange system.		
18	Explain how the lungs are adapted for gaseous exchange.		
19	Explain how the structures of plant tissues are related to their functions		
20	Describe the structure of a leaf and how it is adapted to its function.		
21	Explain how the structure of root hair cells is adapted for the efficient uptake of water by osmosis, and mineral ions by active transport.		
22	Explain how the structure of xylem tissue is adapted for the transport of sugars by a process of translocation.		
23	Explain how the structure of xylem tissue is adapted for the transport of water by a process of transpiration.		
24	Compare how transport in the xylem tissue differs from transport in the phloem tissue.		
25	Define transpiration.		
26	Describe the role of stomata and guard cells in leaves in controlling gas exchange and water loss.		
27	Explain how temperature, humidity, air movement and light intensity affect the rate of transpiration.		
28	Investigate the effect of environmental factors on the rate of water uptake/transpiration rates.		

Keywords:

Aorta
Arteries
Atria
Capillaries
Coronary Arteries
Double Circulatory System
Epidermal
Guard Cells
Haemoglobin
Palisade Mesophyll
Phloem
Plasma
Platelets
Pulmonary Artery
Pulmonary Vein
Red Blood Cells
Spongy Mesophyll
Statins
Stent
Translocation
Transpiration
Urea
Veins
Vena Cava
Ventricles
White blood cells
Xylem