

Summary for Biology 3 Body systems

1. Living things are made of cells. These cells join up to make tissues. The tissues combine to make organs. The organs combine to make systems.

2. Seven of the systems are:-

- a. Digestive
- b. Urinary
- c. Circulatory
- d. Breathing
- e. Reproductive
- f. Nervous
- g. Skeletal

3. The digestive system breaks down our food. The stomach churns up the food to mix it with digestive juices.

4. The urinary system gets rid of excess water. The kidneys filter the blood and send urine to the bladder.

5. The circulatory system takes substances round the body, in the blood. The heart pumps the blood to keep it moving.

6. The breathing system carries out gas exchange. The lungs are where the gas exchange takes place.

7. The reproductive system is designed to make babies. The testes produce male sex cells and the ovaries produce female sex cells. The baby grows in the uterus.

8. The nervous system picks up information about the surroundings. The brain sorts out the information and starts a response.

9. The skeletal system provides support for the body, protects delicate parts and gives a framework for muscles to attach to. The skull protects the brain.

10. A pulse can be felt in an artery. It can be measured in different ways. A fingertip pulsometer, counting the pulse in the wrist or neck for 30 seconds and doubling it or the blood pressure cuff will also give the pulse. The pulse rate is the same as the heart rate.

11. Temperature can be measured in different ways. A clinical thermometer, forehead thermometer, digital thermometer, and ear thermometer can all be used. In each case, the temperature is noted after it stops rising.

12. Blood pressure is a measure of how hard the heart is working. It is measured using a piece of apparatus called a sphygmomanometer. A cuff is placed around the upper arm (or wrist) and inflated. The cuff slowly deflates and gives 2 readings. A blood pressure of 140/80 mm/Hg is around normal.

13. The oxygen saturation of the blood measures how well the blood is carrying oxygen. It can be measured with a fingertip meter.

14. Lung capacity is the maximum volume of air that can be breathed out in a single breath. It is measured using a lung volume bag which is breathed into. The air is then pushed down to the bottom of the bag and the volume can be read.

15. Fertilisation is the joining up (fusion) of a male sex cell (sperm) and a female sex cell (egg). This happens in the oviduct (fallopian tube).
16. Following fertilisation, the embryo divides and travels down to the uterus (womb).
17. The baby is connected to the placenta by the umbilical cord. The placenta takes oxygen and food from the mother's blood and waste travels from the baby's blood to the mother's through the placenta.
18. The baby develops for 40 weeks before being born.
19. The baby is protected by the mother's body and by a sac of water inside the uterus.
20. Harmful substances can pass to a baby from the mother's blood. These include nicotine, alcohol and illegal drugs.
21. Pregnant mothers should not take alcohol, smoke or indulge in illegal drug use.