## **National 4 Biology**

## **Success Criteria**

## **Cell Biology Unit**

## I understand that actions can allow stable body conditions to be maintained when internal or external changes take place

and nerves. I know that the brain and spinal cord are often called the Central Nervous System (CNS).		
2. I understand that receptor cells present in sense organs respond to a stimulus.		
3. I understand that messages (nerve impulses) are sent from stimulated receptor cells to the CNS through nerves.		
4. I understand that impulses are processed at the CNS then passed through nerves to an effector to allow a response to be made.		
5. I understand that that a reflex action is a rapid, protective response carried out when nerve impulses pass to the spinal cord rather than the brain.		
6.I can give examples of reflex actions.		
7. I understand that reaction rate can be altered by alcohol and certain types of drugs		
8. I understand that more sensitive areas of the skin have a greater density of touch receptors.		
9. I understand that homeostasis is the maintenance of a constant environment in the body.		
10. I know that a core body temperature of 37°C is maintained by homeostasis.		
11.I understand that that the hypothalamus is the temperature control centre		
12. I understand that the body responds to an increase in temperature through increased sweating and increased blood flow to the skin.		
13. I understand that the body responds to a decrease in temperature through decreased sweating, decreased blood flow to the skin, shivering, and hairs standing on end.		
14. I understand that blood glucose level is maintained by homeostasis.		
15. I understand that the hormone insulin reduces a high blood glucose concentration by converting the excess glucose to glycogen.		
16. I can state the causes, symptoms and treatment of Diabetes		

National 4 Biology 2.6 Biological actions in response to internal and external changes to maintain stable body conditions

17. I understand that along with homeostasis, internal body conditions can be		
maintained through behaviour.		
18. I understand that behaviour is expressed in response to a stimulus.		
19. I can state examples of behaviour that allow temperature and blood		
glucose concentration to be regulated.		