

15. **What are good sources of vitamins?**

Fruits and vegetables

16. **Which vitamin and mineral are needed for healthy teeth and bones?**

Vitamin D and Calcium

17. **What equipment do you use to crush the food sample to prepare a food solution?**

Pestle and mortar

18. **What chemical do you use to test for starch?**

Iodine

19. **A positive test for starch is when the colour changes from orange –brown to which colour?**

Blue black

20. **What chemical do you use to tests for lipids (fats) in a solution?**

Ethanol

21. **Give an example of a simple sugar.**

Glucose

22. **How is the liver involved in digestion?**

It produces bile, which helps break down lipids.

23. **State the unit that energy in food is measured in.**

Joules (J)

24. **What is the scientific term for someone who is extremely overweight?**

Obese

25. **Name the 3 types of blood vessel in the human body.**

Vein, artery and capillaries.

26. **What is the function of red blood cells?**

To carry oxygen around the body. They contain haemoglobin.

27. **What is health?**

A state of physical and mental well-being

28. **What are some risk factors for increased rate of disease?**

A persons lifestyle or substances in the persons body or environment

29. **What is cancer?**

Uncontrolled growth and division of cells.

30. Name 2 plant tissues.

Epidermal tissues/palisade

mesophyll/spongy

mesophyll/xylem/phloem/

31. How are root hair cells adapted for their function?

Large surface area to take up water.

32. What can diseases be caused by?

Viruses, bacteria and fungi

33. What is a pathogen?

Microorganisms that cause infectious diseases

34. Why do viruses cause cell damage?

Because they live and reproduce inside living cells

35. Give an example of a viral disease.

Measles/HIV (*name only one*)

36. Give an example of a bacterial disease.

Salmonella

37. Give an example of a fungal disease.

Rose black spot

38. What happens if a pathogen enters the body?

The immune system tries to destroy the pathogen

39. What is the role of white blood cells?

Defend against pathogens

40. What do vaccinations do?

Prevent illness in an individual

41. What is an antibiotic?

Medicines that help cure bacterial diseases

42. What are painkillers?

Treat the symptoms of disease but do not kill pathogens

43. Why do new drugs need to be tested before they are used?

To ensure they're safe and effective

44. What are the reactants in photosynthesis?

Carbon dioxide + water

45. What factors can effect the rate of photosynthesis?

Temperature, light intensity, carbon dioxide concentration

46. **What is the difference between aerobic and anaerobic respiration?**
Aerobic uses oxygen where as anaerobic respiration does not.
47. **What is metabolism?**
Sum of all the reactions in a cell or body.
48. **What are the reactants in aerobic respiration?**
Glucose + oxygen
49. **What is homeostasis?**
Maintains the best conditions for enzyme action and all cell functions
50. **What is the purpose of the nervous system?**
To enable humans to react to their surroundings
51. **What makes up the Central nervous system ?**
Brain and spinal cord
52. **What does the pancreas do?**
Controls levels of blood sugar
53. **What disorder is caused by the lack of Insulin produced by the pancreas?**
Diabetes
54. **When is adrenaline produced?**
In times of fear or stress
55. **What is the genetic material made from?**
DNA
56. **What shape is DNA?**
Double helix
57. **How many pairs of chromosomes are in an ordinary human body?**
23
58. **What is variation?**
Differences in the characteristics of individuals
59. **What is a fossil?**
Remains of organisms from millions of years ago, they're found in rocks
60. **When do extinctions occur?**
When there are no individuals or a species still alive
61. **Name 2 abiotic factors.**
Light intensity/temperature/moisture levels/soil pH/Wind
intensity/carbondioxide levels (plants)/oxygen levels (animals)

(choose two only)

62. **Name 2 biotic factors.**

food/predators/pathogens. **(choose two only)**

63. **How is a Polar Bear adapted to its environment? Choose one**

Thick fur to keep warm/small ears to reduce heat loss/large paws to spreadload on snow and ice/thick layer of fat to store energy

64. **What is a predator?**

Consumers that kill and eat other animals

65. **What is the water cycle?**

Water continuously being evaporated and precipitated

66. **Where can pollution occur?**

Water/air/land

67. **How are humans reducing the amount of land available for other animals?**

Choose one

Building/farming/dumping waste

68. **What is contributing to global warming?**

Levels of carbon dioxide and methane

69. **What is the basic unit of life ?**

The cell

70. **What is the average number of cells in the human body ?**

The human body contains about 37.2 trillion cells.

71. **What is the number of bones in the human body ?**

The human body has about 206 bones.

72. **What is the average liters of blood in an adult ?**

The average adult has about 5-6 liters of blood.

73. **Name the organ that absorbs water from waste material and forms faeces.**

Large intestine .

74. **The organ of vision is ?**

The eye .

75. **What is the largest organ in the human body ?**

The skin .

76. **What is the function of the kidneys ?**

Filter waste products from the blood and excrete them as urine.

77. **Which organ protects the heart and lungs?**

The ribcage .

78. Name the organelles in plant cells where photosynthesis occurs?

Chloroplasts .

79. What is biology ?

The study of life

80. What are enzymes ?

Proteins that catalyze chemical reactions