
Student: Niamh Kelly

ID: 23110

01.1 Organ

01.2 Palisade mesophyll → Contains the most chloroplasts. Spongy mesophyll → Contains many air spaces

01.3 Transpiration

01.4 Lignin

01.5 So light can get through it for photosynthesis.

01.6 stomata, guard cells

01.7 Vacuole

01.8 Diffusion

01.9 Mitochondria

02.1 It's a physical barrier against pathogens.

02.2 $63/210 = 3/10$

02.3 187, 31, 156

02.4 He calculated the midpoint value between the result for pH1 and pH3.

03.1 Platelets → Help clot the blood where the vaccine was injected. White blood cells → Produce antibodies to the measles virus.

03.2 1968

03.3 It went up, then it stayed at the top, then it went down.

03.4 It decreased.

03.5 Parents were worried their children would get condition X.

03.6 Have the research peer reviewed.

03.7 Not enough evidence.

04.1 To test for starch you add iodine and it turns blue-black if present. To test for sugar you add Benedict's solution and heat it. It turns brick red if it is present.

04.2 amylase, sugar

04.3 The type of bread

04.4 White bread is fastest. Wholemeal bread is slowest.

04.5 Repeated the tests and found an average.

04.6 58

04.7 Each person's sense of taste is different.

05.1 Ionising radiation, Viruses

05.2 Mitosis

05.3 grow, replicate

05.4 40%

05.5 Chromosomes are pulled to each end of the cell.

05.6 cell membrane

05.7 $50/800 = 0.0625\text{mm}$. $0.0625 \times 1000 = 62.5\mu\text{m}$.

05.8 cells, people

05.9 placebo

06.1 Size of the potato. Type of potato.

06.2 Dry them.

06.3 a balance

06.4 0.1g

06.5 D

06.6 $(1.1/6.0) \times 100 = 18.3$

06.7 Line graph

06.8 water, osmosis, permeable

06.9 0.2 mol/dm³

07.1 Arteries

07.2 It pumps the blood for the person, getting oxygen around their body.

07.3 To give them oxygen.

07.4 Statins

07.5 It's a tube that holds the blood vessel open so blood can flow more easily.

07.6 Smoking increases the risk of getting heart disease. Disease E has a lower risk increase than disease H.

07.7 [Graph drawn perfectly]

07.8 Having a bad diet.

08.1 nucleus

08.2 A, D and E

08.3 CF means enzymes like lipase are blocked in the pancreas. So food is not digested. This means it can't be absorbed into the blood. So there is not enough glucose for respiration to get energy. Without energy, you can't build up body mass.

08.4 1. Large surface area. 2. Good blood supply. 3. Thin walls.

08.5 Less oxygen in the blood means less aerobic respiration, so less energy is released. The heart might beat faster to try and get more oxygen around.

