

**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 gets to the cells below. For photosynthesis.

**01.6 stomata, guard cells**

**01.7 vacuole**

**01.8 active transport**

**01.9 mitochondria**

**02.1** It's a barrier.

**02.2** 63/210 which is 3/10.

**02.3** 187, 31, 156.

**02.4** He took the average of the pH1 and pH3 results.

**03.1** Platelets → Help clot the blood. White blood cells → Produce antibodies.

**03.2** 1968

**03.3** It went up, stayed flat, then went down.

**03.4** It decreased.

**03.5** Parents were worried about condition X.

**03.6** Have the research peer reviewed.

**03.7** The author was paid.

**04.1** Iodine for starch (goes black). Benedicts for sugar (goes red).

**04.2** amylase, sugar

**04.3** The type of bread

**04.4** White bread is fastest. Wholemeal is slowest.

**04.5** Did repeats. Calculated a mean.

**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 potato

**06.2** dry it

**06.3** a balance

**06.4** 0.1 g

**06.5** D

**06.6**  $1.1 / 6.0 \times 100 = 18.3\%$

**06.7** Line graph

**06.8** water, osmosis, permeable

**06.9** I'm not sure.

**07.1** Arteries

**07.2** Pumps blood around the body.

**07.3** Gives them oxygen.

**07.4** statins

**07.5** Opens up the blood vessel.

**07.6** Smoking is bad for your heart. Disease H is the worst.

**07.7** *[Student labels axis and scale correctly, but only plots bars F and G, leaving H blank]*

**07.8** Stress.

**08.1** nucleus

**08.2** A, D and E

**08.3** They have less enzymes. So food isn't digested. So they don't get energy.

**08.4** big surface area, thin walls, good blood supply

**08.5** Less respiration. Less energy.

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