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 To let the light through to the palisade layer. This is 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 = 3/10
02.3 Killed at pH1 was 187. Killed at pH5 was 31. 187-31 = 156.
02.4 He did (23+63)/2 which is 43. It's the average of 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 stayed the same, then 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 Biased because he was paid.

04.1
You test for starch with iodine.
You test for sugar with Benedict's.
If they are there the colour changes. If not they don't.
04.2 amylase, sugar
04.3 The type of bread
04.4 White bread was quickest. Wholemeal was slowest.
04.5 He repeated it to make it more reliable. And got an average.
04.6 58+55+61 = 174. 174/3=58.
04.7 More people would make the investigation safer.

05.1 Ionising radiation, Viruses (Ticks both)
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 = 0.0625mm. 0.0625 x 1000 = 62.5um.

05.8 cells, people
05.9 placebo

06.1 The size of the potato. The type of potato.
06.2 You should wash them.
06.3 A balance.
06.4 1.0g
06.5 D
06.6 1.1 / 6.0 x 100 = 18.3%
06.7 Bar chart
06.8 water, diffusion, permeable
06.9 about 0.2

07.1 Arteries
07.2 It helps move the blood around the body. This carries oxygen.
07.3 It gives them oxygen for their blood.
07.4 Statins
07.5 It opens up the blood vessel. So more blood can flow to the heart.
07.6 Smoking increases your risk of getting heart disease. Disease H is the most affected by smoking.
07.7 (Draws graph correctly)
07.8 Not doing enough exercise.

08.1 Nucleus
08.2 A, D and E
08.3
The person can't digest food because the enzymes don't work properly. So fat and protein don't get broken down.
They can't gain mass because the food they eat isn't absorbed. The undigested food just passes through them. This means they don't get the calories they need to build muscle or fat.
08.4 1. big surface. 2. thin walls. 3. lots of capillaries.
08.5 Less oxygen means less energy from respiration. So your muscles get tired easily and you feel out of breath.