(a) Carbon, Hydrogen, Oxygen (C.H.O)

(b) $C_x(H_20)_y$

(c) Monosaccharide

(d) Polysaccharide

(e) Cell Wall

(f) Bread, potato

(a) Blue line indicates the most suitable level of PH

Germination %

Soil PH

(b) Hypothesis: A theory based on an educated guess

(c) Soil PH

(d) Control acts as a comparison

(e) Scientific journal or online

(f) Human error/ bias/ small sample size/ accidental discoveries

(a) Support/ protection/ movement

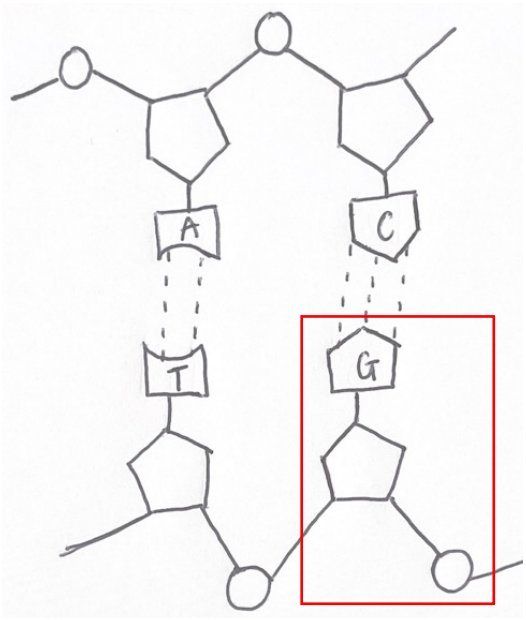
(b) Skull/ rib/ mandible/ sternum

(c) Protein

(d) Pelvis

(e) Arrow must point towards ribs or spine

(a)



(b) Red box indicates a nucleotide (including a base, phosphate and deoxyribose)

(c) Deoxyribonucleic acid

(d) Hydrogen bond

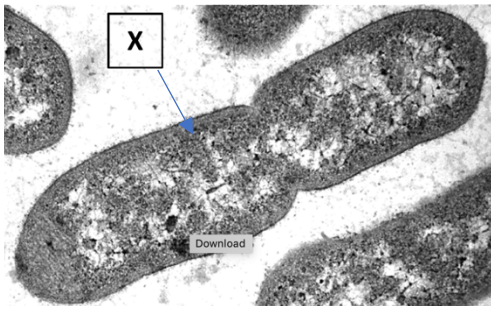
(e) Purine

(f) Mitochondria

(g) Uracil

(a) Rod

(b) Blue arrow indicates location of the cell wall in this bacterial cell



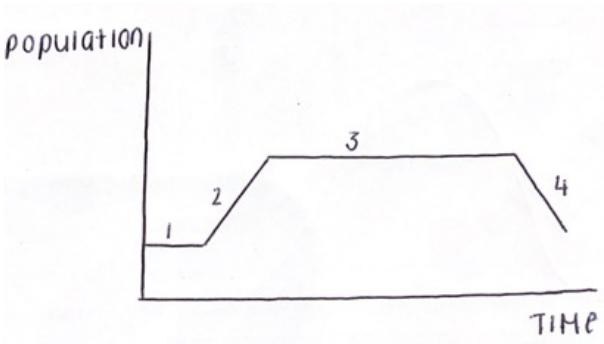
(c) Binary Fission

(d) Suitable Temperature/ PH/ Oxygen/ food

(e) E.coli/ salmonella

(f)

(i)



(ii) Decline

(a) 90% of energy lost between trophic levels or Only 10% of energy transferred between trophic levels

(b) Limited resources/ high levels of reproduction/ symbiosis

(c) Allows for seed dispersal

(d) ADH increases permeability of the collecting duct

(e) Antibiotics are used to kill bacteria not viruses

(f) This is to allow for the production of gametes in sexual reproduction

(g) This prevents oxygenated blood and deoxygenated blood from mixing

(a)

(i) Violet

(ii) Blue

(iii) It is reflected

(b) Passed from electron acceptor to electron acceptor and returns to the chlorophyll or enters the non-cyclical pathway and combines with carbon dioxide to create glucose

(c) Water

(d) Absorbed from soil

(e) To increase the rate of photosynthesis

(a)

(i) Bioshpere

(ii) Biotic factor

(b)

(i) Apparatus: pooter

How to use: suck through A and the animal enters through B

Apparatus: Tullgren funnel

How to use: Heat causes animals to move downward

(ii) Quadrat: Obtain a random sample by throwing a pen over your shoukder and placing the quadrat over the selected area, count the plants within the quadrat and repeat to ensure a large sample selection

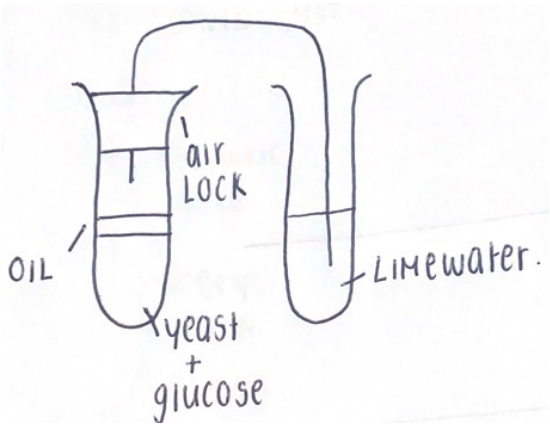
(a)

(i) Respiration which occurs without oxygen

(ii) Lactic acid

(b)

(i)



(ii) Allows for enzymes to work at their best

(iii) The yeast will run out of glucose

(iv) Bubbles stop forming

(v) Name: Idoform

Colour: yellow

(a) Asepsis: without pathogens

Sterility: without microorganisms

(b)

(i) 1- Malt Agar

2- Sterilized leaf

(ii) 1- Scalpel

2- Walls for the left ventricle are thicker than the walls of the right ventricle

(iii) 1- Root or shoot

2- Using a ruler

(iv) 1- allows for light to pass through the section

2-