

FORM 2 (Grade 8) REVISIONS

1. What is the function of chlorophyll in plants ?
A to store raw materials for manufacture of sugars
B to store magnesium ions
C to release energy from carbohydrates
D to trap and convert light energy into chemical energy of sugars
2. The growth of plants and crops using nutrients solution (but without soil) is
A farming B aeroponics
C hydroponics D germination
3. If the daily diet is deficient in vitamins C, then an individual suffers from bleeding of gums and bruised skin, a disease called
A rickets
B scurvy
C anaemia
D kwashiorkor
4. Which two parts are found only in plant cell but not in animal cell ?
A cell wall and sap vacuole
B cell wall and nucleus
C chloroplast and cell membrane
D nucleus and cytoplasm
5. Which one of the following helps a plant to absorb carbon dioxide gas rapidly ?
A arrangements of leaves on the stem
B green colour
C large surface area with numerous pores
D yellow colour
6. Which of the following is a storage leaf in plants?
A. Beetroot B. Sugar cane C. Cauliflower D. Cabbage
7. Which organ in man filters blood and removes or excretes waste products like excess salts and water?
A Heart
B Brain
C kidney
D Stomach
8. The main cause of obesity and over weight in man, in the daily meal too rich in
A Proteins B Vitamins C Saturated fats D Minerals

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9. The table below shows some of the food substances in four meals. Which meal would help food to move easily along the intestines and prevent constipation.

g/100g

Meal	Carbohydrate	Fat	Dietary fibre	Protein
A	18	12	8	25
B	30	32	2	12
C	40	15	10	5
D	38	4	22	10

10. Two important agents of transfer of pollens in the flowers of plants are

- A Birds and insects
- B Wind and insects
- C Microorganisms and tadpoles
- D worms and insects.

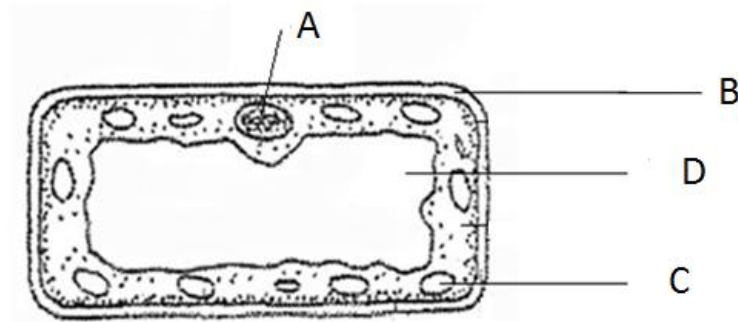
2. The table shows some of the nutrients in four meals.

Meal	Carbohydrate	Fat	Dietary fibre	Protein
1	18	12	8	25
2	30	32	2	12
3	40	15	10	5
4	38	4	22	10

- (a) Which meal will be the most likely to keep the digestive system healthy and prevent constipation ? [1]
- (b) State the two nutrients made up of the elements of carbon, hydrogen and oxygen only [2]
- (c) Which nutrients consists of carbon, hydrogen, oxygen and nitrogen ? [1]
- (d) Which meal is most likely to cause overweight and obesity if consumed daily ? [1]
- (e) State two nutrients not shown in the table,that helps to protect and prevent the body from deficiency diseases. [2]
- (f) Name the nutrients from the table which is the main cause of the deficiency disease called kwashiorkor (poor muscle development, skinny arms and legs) [1]

[Total marks: 8]

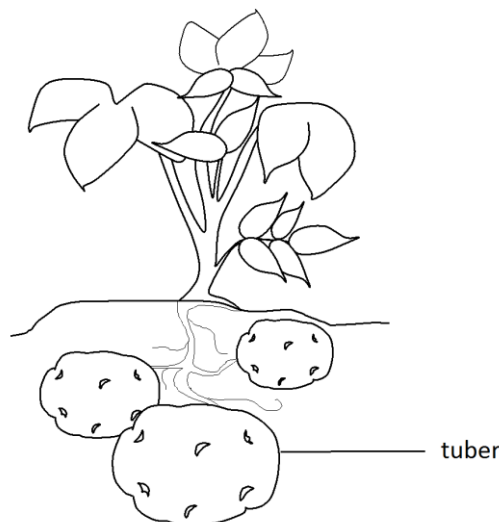
3. The figure below illustrates a plant cell from a plant



- (a) Where would this cell be found in a plant ?
- (b) Give a reason for your choice in part (a)
- (c) Name parts A, B, C and D
- (d) Name the ribbon like structures present in A
- (e) Part C contains a green substance. Name this substance
- (f) State the function of the green substance
- (g) Name the mixture of salt, sugars, pigments and water contained in part D

[Total marks: 10]

4. The diagram shows a potato plant growing in the soil



- (a) List down two substances absorbed by the roots from the soil
- (b)(i) Name the process of food manufacture in the leaves of the plant
- (ii) Write down a word equation to summarize the process
- (iii) Which gas is used during the process ?
- (iv) Which gas is released during the process ?
- (v) Name the tiny pores found abundant in the leaves and the potato tubers in form of an insoluble storage carbohydrate. Name this storage substance
- (vi) Name the process that allows the evaporation and loss of water vapour from the tiny pores to cool the plant
- (vii) List down two importance of food production in the plants

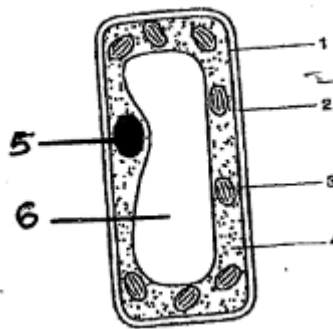
[Total marks: 11]

5. Name the followings

- (i) The organ which pumps blood to all parts of the body in man
- (ii) The organ that control all activities of the human body
- (iii) The place where an organism live, feed and may reproduce
- (iv) The invertebrates with three pairs of jointed legs and have wings to fly
- (v) The distribution of fruits and seeds far away from parent plants by animals, wind and self explosion
- (vi) The development of a seed into a seedling (baby plant)
- (vii) The deficiency disease caused by regular consumption of diet poor in calcium and vitamin D

[Total marks: 7]

6. The figure below illustrates a typical plant cell.



- a. (i) Part (1) controls the entry and exit of substances. Name part 1
(ii) From the list below state two molecules that part 1 allows to enter, into the cell.
Fats, Starch, Glucose, Proteins, Water.
- b. (i) Name part (2)
(ii) Part (2) contains a tough, resistant substance. Name this complex substance
(iii) Name the small sac-like structure (3)
(iv) State the green substance contained in part (3)
(v) Which important process occurs in structure (3)?
- c. What is the jelly like fluid (4)
- d. (i) Name part (5)
(ii) State the ribbon like genetic materials contained in part (5)
- e. (i) What is the space (6) ?
(ii) state the mixture of salts, sugars, pigments and water contained in space

[Total: 13 marks]

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7. Green plants manufacture their own food (sugar).
- (i) Which food (sugar) is first formed during the process?
 - (ii) Name the process
 - (iii) The sugar first produced is converted into a storage food substance. Name the complex, insoluble food substance.
- b.(i) State the four factors necessary for their process
- (ii) Which gas is used up, in the food making process?
 - (iii) which gas is released?
- c. Write down a word equation for this food production process in plants.
- d. List down two importance of the food making process in plants.

[Total: 13 mark]

8. Use the list below, to describe the statements

Stomata, Phosphorus, Chlorophyll, Iodine, Green houses, Compost, Kidney variegated, sodium hydroxide, water, germination.

- Green substance that traps light energy in plants
- Chemical Substance that absorbs carbon dioxide from air
- Solution used in the laboratory to test for food produced and stored in leaves.
- Tiny pores mostly present on undersurface of leaves that allow exchange of gases.
- Alternative to artificial fertilizers added to soil to improve healthy growth of plants.
- A useful mineral needed for healthy growth of plants
- Construction that are warm, humid and well lighted, for large scale crops and ornanmentals production.
- Leaves with green and non-green parts.
- Development of a seed into a seedling (baby plant).
- Important substance needed for development of seeds into seedlings.
- Organ that filters blood and excretes wastes like urea from the body.

[Total: 11 marks]