



## Natural Science and Technology – Grade 6

Welcome to your Conquesta Olympiad. When you have decided which of the answers is correct, scratch out the letter in the matching square on your answer sheet. Example: If the answer to question 4 is c, then scratch out the letter c in the square containing c next to the number 4 (see example 1 below). If you've made a mistake and b should have been the answer, neatly cross out the mistake and then scratch out b (see example 2 below).

Example 1:- 

4.	a	b	<del>c</del>	d
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Example 2:- 

4.	a	<del>b</del>	<del>c</del>	d
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Plants make their own food by a process called photosynthesis.

1. In which part of the plant does this process take place?

- (a) Root.
- (b) Stem.
- (c) Leaf.
- (d) Branch.



Plants make more glucose than they can immediately use.

2. They convert most of the glucose sugar into ..... in order to store it.

- (a) starch
- (b) carbon
- (c) chlorophyll
- (d) water



3. Which of these plants stores food in its roots?

- (a) Spinach.
- (b) Carrots.
- (c) Tomato.
- (d) Cabbage.

Foods can be tested for the presence of starch by adding iodine solution and looking for a colour change.

4. To show a positive test for starch, iodine solution changes colour from .....

- (a) blue to blue-black.
- (b) blue-black to brown.
- (c) brown to blue-black.
- (d) blue to reddish brown.

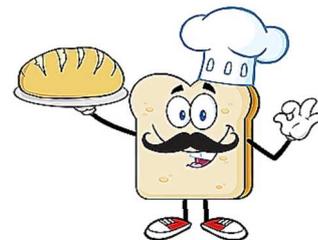


5. Which of these statements is an **incorrect** comparison between starch and glucose?

- (a) Starch tastes sweeter than glucose.
- (b) Glucose tastes sweeter than starch.
- (c) Glucose is soluble in water whereas starch is insoluble in water.
- (d) Both starch and glucose are white in appearance.

6. Which of these foods is a source of carbohydrates?

- (a) Bacon.
- (b) Cheddar cheese.
- (c) Eggs.
- (d) Pasta.



7. The disease that became common for sailors, because of long voyages without Vitamin C in their diet, was .....

- (a) mutiny.
- (b) scurvy.
- (c) Ebola.
- (d) herpes.

Each food nutrient has a specific function in the body.

8. The purpose of proteins in a diet is for .....

- (a) energy.
- (b) building strong bones and teeth.
- (c) growth and repair.
- (d) storing energy and providing insulation.

9. A balanced diet contains .....

- (a) proteins, carbohydrates and fats.
- (b) quantities of food from all nutrient groups, as well as water.
- (c) only vegetables and meat.
- (d) equal amounts of food from all nutrient groups.



A food pyramid provides a guide to a healthy, balanced diet.



10. Which of these foods are found at the bottom of the food pyramid?

- (a) Fats and oils.
- (b) Fruit and vegetables.
- (c) Milk and dairy products.
- (d) Cereals and starch.



11. What level of the food pyramid has foods that one should eat the least from?

- (a) Top.
- (b) 2<sup>nd</sup> from the top.
- (c) Bottom.
- (d) 2<sup>nd</sup> from the bottom.

12. Food is processed mainly to make it edible, last longer and to .....

- (a) reduce some of the nutrients.
- (b) improve its nutrient value.
- (c) make it low GI.
- (d) make it rich in fats and sugars.

13. Which of these is an example of a highly processed food?

- (a) Milk.
- (b) Nuts.
- (c) Biscuits.
- (d) Vegetables.



14. An ecosystem is .....

- (a) an area with a lot of trees and bushes.
- (b) an area where living and non-living things depend on each other in many ways.
- (c) the feeding relationship between many different organisms.
- (d) a rocky shore.

Choose the correct answer from (a) to (d) for questions 15 and 16.

- (a) Scavenger.
- (b) Producer.
- (c) Decomposer.
- (d) Consumer.



15. What type of organism makes its own food?

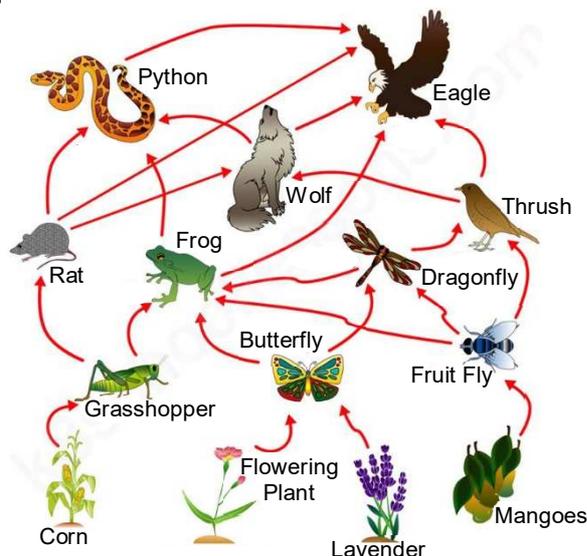
16. What type of organism breaks down dead and decaying matter?

17. An organism that kills and eats another organism is .....

- (a) the prey.
- (b) a predator.
- (c) a parasite.
- (d) a decomposer.



Study the diagram of a food web below, then answer questions 18 – 21.



18. A food web is a .....

- (a) system of interlocking and interdependent habitats.
- (b) system of interlocking and interdependent food chains.
- (c) combination of animals from different habitats.
- (d) combination of animals and plants from different habitats.

19. Identify the correct option with two predators from the food web diagram above.

- (a) Wolf and grasshopper.
- (b) Frog and fruit fly.
- (c) Eagle and frog.
- (d) Wolf and butterfly.

20. Which of the organisms from the food web above use the energy from the Sun to make food?

- (a) Butterfly.
- (b) Lavender.
- (c) Dragonfly.
- (d) Thrush.



21. Which of the following statements shows a primary, secondary and tertiary consumer from the food web?

- (a) Fruit fly, dragonfly and butterfly.
- (b) Corn, grasshopper and frog.
- (c) Rat, python and eagle.
- (d) Mangoes, dragonfly and wolf.

22. Which of these statements is *incorrect*?

- (a) In solids, the particles are closely packed and they vibrate in one place.
- (b) In liquids, the particles are closely packed together and they have no fixed shape.
- (c) In liquids and gases, particles are free to move around.
- (d) In gases, particles are far from each other and the particles move in one direction.

