E-mail: Info@saolympiads.co.za website : www.saolympiads.co.za

GRADE 8

Natural Science

=

E-mail: Info@saolympiads.co.za website : www.saolympiads.co.za

A. Paper structure for the olympiad

Fifty (50) multiple Choice questions in accordance to the different levels of Bloom's taxonomy.

B. How does it align with the curriculum?

Questions of each CAPS topic are aligned to the time covered throughout each term, i.e. topics that require more time (as per the ATP) will include more questions.

C. How it goes beyond?

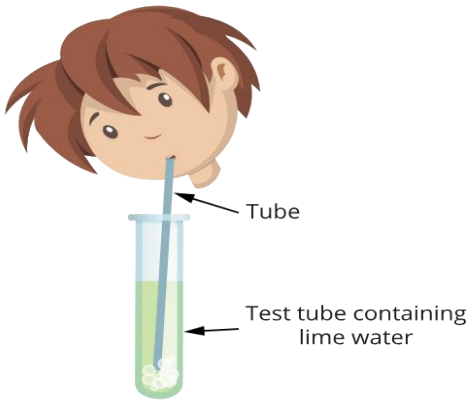
The olympiad includes some (between 10-12%) general knowledge questions related to the topics or units covered in the CAPS curriculum.

D. Sample questions

1. Multiple Choice Questions

1. Which of the following statements is correct regarding the starch test using iodine?
   A. The presence of starch is indicated by a blue-black color change when iodine solution is added
   B. A yellow color change indicates a high concentration of starch when iodine solution is added
   C. The iodine solution must be heated to react with starch and produce a color change.
   D. Starch does not react with iodine; the test is for glucose. (1)

2. During an experiment, you blow through a straw into a test tube filled with lime water. What will the colour of the limewater be?

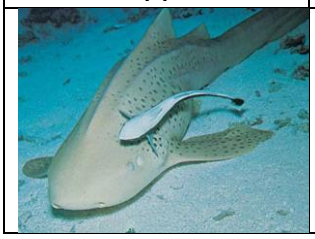


   A. Remains the same.
   B. Turns milky white.
   C. Turns yellow.
   D. Turns green. (1)

3. Various factors can limit the rate of photosynthesis. Which of these variables can limit photosynthesis?

   A. Carbon dioxide concentration
   B. Oxygen concentration
   C. Time
   D. pH (1)

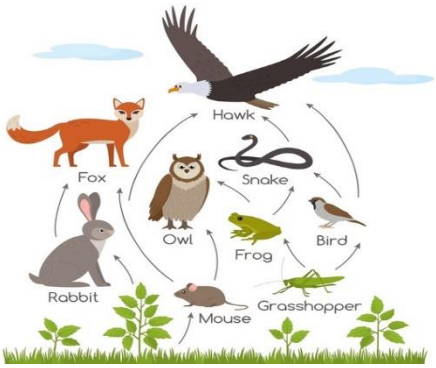
4. Which ONE of the following is an example of parasitism? (1)

A	B	C	D
			

5. Study the table about the feeding relationships in an ecosystem. Identify the correct example of each.

	Predator	**Scavenger**	**Insectivor**
A	Ladybird feeds on aphid	Seagull	Pangolin
B	Seagull	Pangolin	Vultures
C	Ladybird feeds on aphid	Pangolin	Seagull
D	Antbear	Striped Hyena	Eagles hunt meercats

6. From the following diagram, identify the producer



A. Fox
B. Frog
C. Grass
D. Bird

7. The two snakes below look very similar, but the one is poisonous whereas the other is harmless. This is an example of …

https://boingboing.net/2022/08/24/the-rhyme-to-differentiate-coral-snakes-from-king-snakes-could-get-you-killed.html

A. Camouflage
B. Adaptation
C. Imitation
D. None of the above (1)

8. What is “monkey pox”?
   A. A type of fruit that monkeys eat
   B. A skin disease that only affects monkeys
   C. A viral disease that can affect both humans and animals, causing fever and a rash
   D. A game played by monkeys in the jungle (1)

9. Helium is the second element of the periodic table. This means that …
   A. It contains 2 electrons
   B. It contains 1 electron
   C. It contains 2 atoms
   D. It contains 1 atom

10. Which of the following is an example of a diatomic element?
   A. Water (H_2O)
   B. Table salt (NaCl)
   C. Oxygen (O_2)
   D. Air (1)