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GRADE 7

Natural Science

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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. People often wonder if there is life on Mars. Why are Earth organisms unable to survive there?

   A. Mars has a high level of oxygen that is topic to Earth organisms
   B. Mars has high concentrations of liquid water that Earth organisms are not adapted to
   C. Mars experiences extreme temperatures that Earth organisms cannot tolerate
   D. Mars has a very thick atmosphere (1)

2. What does the term invertebrates mean?

   A. Animals that have a backbone
   B. Animals that do not have a backbone
   C. Insects that do not have a backbone
   D. Insects that have a backbone (1)

3. Which of the following organisms does not belong to the Plantae kingdom? (1)

A	B	C	D

4. Which of the following statements does NOT explain the characteristics of a monocotyledon?

   A. Long narrow leaves
   B. Flower parts in threes
   C. Shallow fibrous roots
   D. stems branch and become woody (1)

5. Your friend did not know that birds can also pollinate flowers. Why do some flowers attract birds for pollination?

   A. Birds provide flowers with nutrients through their beaks.
   B. Birds help in the spread of pollen by moving from flower to flower.
   C. Birds are attracted to the scent of flowers, which helps flowers produce more nectar.
   D. Birds protect flowers from being eaten by insects. (1)

6. Study the following contraceptive.

7. What is the purpose of the above contraceptive method?

A. To regulate menstrual flow
B. To support the pelvic organs
C. To prevent pregnancy by blocking sperm from entering the uterus
D. To prevent pregnancy by blocking sperm from entering the vagina (1)

8. Your teacher asks you to look in her science storeroom and choose a surface tile on which you will do a fire experiment.
Which physical property must you keep in consideration when choosing a tile?

A. electrical conductivity
B. melting point
C. flexibility
D. none of the above (1)

9. Study the following table of substance X

	Melting point (^{0}C)	Boiling point (^{0}C)
Substance X	- 12	5

What state will the substance be in at room temperature?

A. Solid
B. Liquid
C. Gas
D. Plasma (1)

10. Most main retailers in South Africa are encouraging shoppers to make use of bag alternatives (instead of plastic bags) to carry their groceries.

https://www.amazon.co.uk/Juvale-Storage-Handbag-Grocery-Shopping/dp/B078NKD1JH

What is the main purpose of this initiative?

A. To increase sales of reusable bags and make money

B. To offer shoppers more stylish options for carrying groceries

C. To comply with government regulations on shopping bags

D. To reduce the use of plastic bags and promote environmental sustainability (1)

11. Which of the following is a common use of chromatography?

A. Analysing inks and dyes

B. Cooking food

C. Cleaning surfaces

D. Measuring weight (1)