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Natural Sciences & Technology Olympiad
GRADE 6

DATE: 25 AUGUST 2026

TIME: 90 MINUTES

INSTRUCTIONS:

1. This booklet has 11 pages (including the cover) with 50 multiple-choice questions.
2. Use the answer sheet provided.

   Circle the letter corresponding to your answer.
3. Each question carries 1 mark.
4. You have 90 minutes to answer all the questions on this paper, which works out to an average of 1.8 minutes per question.
5. Read each question carefully before answering.

ENJOY THE OLYMPIAD.

Grade Six Natural Sciences and Technology Olympiad 2026

Indicate the correct answer by circling the corresponding letter on the answer sheet provided.

1. What is a PREDATOR? **(1)**
A. An animal that makes its own food.
B. An animal that is hunted by others.
C. An animal that hunts and eats other animals.
D. An animal that only eats plants.

2. Which of the following is an example of PREY? **(1)**
A. Shark
B. Lion
C. Seal
D. Dolphin

3. Which ocean food chain is correct? **(1)**
A. Shark → Fish → Plankton → Sun
B. Plankton → Small fish → Large fish → Shark
C. Small fish → Plankton → Shark → Sun
D. Large fish → Small fish → Plankton → Shark

4. Why are sharp teeth an important adaptation for some ocean predators? **(1)**
A. To help them swim faster.
B. To help them breathe underwater.
C. To help them catch and tear their prey.
D. To help them hide from predators.

5. Which adaptation helps a predator blend into its environment? **(1)**
A. Camouflage
B. Long legs
C. Soft fur
D. Bright colours

6. Which of the following helps to REDUCE pollution? **(1)**

A. Littering in public places.
B. Recycling paper and plastic.
C. Throwing waste into rivers.
D. Burning rubbish.

7. Why is it important to save water? **(1)**

A. Water is only used at home.
B. Water can run out if wasted.
C. Water is only for plants.
D. Water is easy to replace.

8. What should you do if you see litter on the school playground? **(1)**

A. Ignore it.
B. Kick it aside.
C. Pick it up and put it in a bin.
D. Wait for someone else to pick it up.

9. How does cutting down too many trees affect the environment? **(1)**

A. It increases rainfall.
B. It improves animal habitats.
C. It reduces habitats and increases soil erosion.
D. It makes the air cleaner.

10. Which action helps protect the environment in your community? **(1)**

A. Using plastic bags every day.
B. Leaving taps running.
C. Planting trees and cleaning public areas.
D. Throwing rubbish.

11. Which word best describes when a solid turns into a liquid? (1)

A. Freezing
B. Evaporation
C. Melting
D. Condensation

12. When candle wax is heated and becomes liquid, what process is taking place? (1)

A. Freezing
B. Condensation
C. Melting
D. Evaporation

13. A candle is left to cool after being lit. The liquid wax becomes solid again. What process is this? (1)

A. Evaporation
B. Condensation
C. Melting
D. Freezing

14. Why does water form on the outside of a cold bottle on a warm day? (1)

A. The water is freezing.
B. The water is melting.
C. The water vapour in the air is condensing.
D. The water is evaporating.

15. Which investigation best shows EVAPORATION? (1)

A. Heating candle wax until it melts.
B. Placing water in the freezer.
C. Leaving a shallow dish of water in the sun.
D. Cooling melted wax until it hardens.

16. What is rust? **(1)**

A. A type of paint.
B. A chemical change that happens to iron.
C. Dirt on metal.
D. Water on metal.

17. Which two things are needed for rusting to happen? **(1)**

A. Sunlight and heat
B. Water and air
C. Paint and metal
D. Cold and shade

18. A bicycle is left outside in the rain for a long time. What is most likely to happen? **(1)**

A. It will melt.
B. It will freeze.
C. It will rust.
D. It will evaporate.

19. Why does a nail rust faster in salty water than in fresh water? **(1)**

A. Salt cleans the nail.
B. Salt slows down rusting.
C. Salt speeds up the rusting process.
D. Salt removes oxygen.

20. Which method is BEST to prevent rusting? **(1)**

A. Leaving metal outside.
B. Painting or coating the metal.
C. Washing metal with water.
D. Scratching the metal.

21. Which symbol represents a cell in a circuit? **(1)**

A. A straight line.
B. A circle with a cross.
C. One long line and one short line.
D. A zigzag line.

22. What does the bulb symbol in a circuit show? **(1)**

A. Where electricity is stored.
B. Where electricity is switched off.
C. Where light is produced.
D. Where wires are connected.

23. Which symbol would you use to show a switch in a circuit diagram? **(1)**

A. A zigzag line.
B. A break in a line with a lever.
C. A circle.
D. Two parallel lines.

24. Why do scientists use symbols instead of real pictures in circuit diagrams?

(1)

A. Symbols look nicer.
B. Symbols make diagrams quicker and easier to understand.
C. Symbols use more space.
D. Symbols stop electricity.

25. Which circuit diagram is drawn correctly using symbols? **(1)**

A. One with pictures of real bulbs and wires.
B. One with labels only.
C. One using standard circuit symbols.
D. One without a cell.

26. What is load shedding? **(1)**

A. Saving water.
B. Planned power cuts to reduce electricity demand.
C. Fixing broken appliances.
D. The use of solar panels.

27. Why does South Africa use load shedding? **(1)**

A. To waste electricity.
B. To reduce electricity bills.
C. To prevent the power system from failing.
D. To make people sleep earlier.

28. Which action helps save electricity at home? **(1)**

A. Leaving lights on all night.
B. Using appliances during peak times.
C. Switching off lights when they are not in use.
D. Opening the fridge often.

29. How does saving electricity help reduce load shedding? **(1)**

A. It increases electricity use.
B. It lowers demand on the power supply.
C. It damages appliances.
D. It stops power stations.

30. Which is the BEST choice during load shedding? **(1)**

A. Using candles safely and turning appliances off.
B. Plugging in all devices at once.
C. Leaving geysers on.
D. Opening the fridge many times.

31. What is a CONDUCTOR? **(1)**

A. A material that stops electricity.
B. A material that allows electricity to flow.
C. A source of electricity.
D. A type of circuit.

32. Which of the following is an INSULATOR? **(1)**

A. Copper
B. Aluminium
C. Plastic
D. Iron

33. Why are electrical wires covered with plastic? **(1)**

A. To make them colourful.
B. To help electricity flow better.
C. To prevent electric shocks.
D. To make wires heavier.

34. Which material would be BEST to use for the handle of a metal pot? **(1)**

A. Steel
B. Copper
C. Wood
D. Aluminium

35. Which combination is SAFEST for making an electrical plug? **(1)**

A. Metal outside and plastic inside.
B. Plastic outside and metal inside.
C. Wood outside and rubber inside.
D. Plastic only.

36. What do plants use to make their own food? **(1)**

A. Soil only
B. Sunlight
C. Rocks
D. Wind

37. Which part of the plant mainly makes food? **(1)**

A. Roots
B. Stem
C. Leaves
D. Flowers

38. What gas do plants take in from the air during the process of PHOTOSYNTHESIS? **(1)**

A. Oxygen
B. Nitrogen
C. Carbon dioxide
D. Hydrogen

39. Why do plants need sunlight? **(1)**

A. To grow flowers.
B. To keep animals warm.
C. To make food.
D. To breathe.

40. A plant kept in a dark cupboard for two weeks will most likely: **(1)**

A. Grow faster.
B. Stay the same.
C. Become weak or die.
D. Produce more food.

41. Which action helps a plant make more food? **(1)**

A. Removing its leaves.
B. Giving it enough sunlight and water.
C. Covering it with plastic.
D. Keeping it in cold air.

42. How are plants important to animals and humans? **(1)**

A. They use up all the oxygen.
B. They provide food and oxygen.
C. They only make shade.
D. They stop rainfall.

43. What would happen if there were no green plants on Earth? **(1)**

A. More oxygen would be produced.
B. Food chains would be affected.
C. Animals would grow faster.
D. Air would be cleaner.

44. Which statement BEST explains why photosynthesis is important? **(1)**

A. It helps plants move.
B. It helps plants make seeds.
C. It provides food and oxygen for living things.
D. It changes soil into air.

45. Which practice BEST supports healthy plant growth at school or home? **(1)**

A. Overwatering plants.
B. Cutting leaves often.
C. Planting in sunlight and watering correctly.
D. Keeping plants indoors all the time.

46. A learner sets up two plants:

- **Plant A is kept in sunlight and watered regularly.**
- **Plant B is kept in a dark cupboard and watered regularly.**

What is the most likely result after two weeks? (1)

A. **Plant B** will grow faster because it is in a dark place.
B. **Both** plants will grow the same because they both receive water.
C. **Plant A** will grow better because it receives sunlight for photosynthesis.
D. **Plant B** will produce more flowers because it is in the dark.

47. Which nutrient helps build and repair the body? (1)

A. Carbohydrates
B. Proteins
C. Fats
D. Vitamins

48. Which nutrient gives the body ENERGY to work and play? (1)

A. Proteins
B. Vitamins
C. Carbohydrates
D. Water

49. Why are vitamins and minerals important for the body? (1)

A. They provide the most energy.
B. They help the body stay healthy.
C. They make food taste better.
D. They replace water.

50. Why is the Moon important to Earth? (1)

A. It causes earthquakes.
B. It controls the weather.
C. It causes tides in the oceans.
D. It blocks sunlight.

TOTAL MARKS = 50