

SCO INTERNATIONAL OLYMPIAD

CLASS 2 SCIENCE PAPER

SCO International Science Olympiad 2024-25
Set A | Solved Question Paper with Answer Key

**Designed for Class 2 learners with scientific curiosity,
everyday observation, environmental awareness,
space science, safety habits, and reasoning practice.**

- age-fit Science practice for Class 2 / primary-level learners globally
- question pathways across Science, Environment, Plants, Animals, Space, Health, Safety, Reasoning, and Sustainability
- solved paper, answer key, explanation, and publication-ready formatting for Olympiad preparation and classroom enrichment

Science	Environment	Science	Observation	Earth Space
Health	Safety	Reasoning	Practice	Answer Key

SCO International Science Olympiad - Class 2

Solved Question Paper | Set A | 2024-25 | Answer Key and Explanations

Paper Snapshot

Total Questions: 35 | Suggested Time: 1 hour

Question Type: Multiple Choice Questions with one correct answer per question

Sections: General Science, Visual Reasoning, Earth and Universe, Environmental Case Studies, Achievers Section

Purpose: To build observation, scientific thinking, environmental awareness, and practical decision-making in young learners.

Candidate Guidelines

Read every question carefully before choosing the answer.

Only one option is correct for each question.

Use the answer key and explanations after attempting the paper to understand the reason behind every answer.

No calculator is required. The focus is on observation, reasoning, and everyday science understanding.

If a question includes a passage or story, read the full passage before answering.

Learning Focus

Matter and change: melting, heat transfer, fog, ripples, and light.

Living world and environment: plants, animals, resources, pollution, and recycling.

Earth and space: planets, moons, the Sun, and the solar system.

Safety and responsible action: first aid, reducing plastic, planting trees, and protecting nature.

Section A - General Science and Everyday Phenomena

Question 1 | General Science

Passage / Situation: When a piece of ice is left in a warm room, it slowly melts and turns into water.

Question: Why does ice melt in warm conditions?

- A. Because cold air makes it freeze.
- B. Because heat from the air makes the ice turn into water.
- C. Because sunlight always melts the ice instantly.
- D. Because water from the ground makes it melt.

Correct Answer: B. Because heat from the air makes the ice turn into water.

Explanation: Ice melts when it receives heat from the warm air. Heat changes ice from solid state to liquid water.

Question 2 | General Science

Passage / Situation: We wear coats in winter to keep ourselves warm.

Question: Why do coats keep us warm?

- A. Because they trap body heat and reduce heat loss.
- B. Because they make us look nice.
- C. Because they help us run faster.
- D. Because they let cold air inside.

Correct Answer: A. Because they trap body heat and reduce heat loss.

Explanation: A coat works like an insulating layer. It traps warm air close to the body and reduces heat loss.

Question 3 | General Science

Passage / Situation: When a button is pressed on a remote control, the television changes the channel.

Question: Why does the TV change channels when the remote button is pressed?

- A. Because the remote sends a signal to the TV.
- B. Because the remote makes a loud sound.
- C. Because the TV likes the button being pressed.
- D. Because the remote makes the TV grow.

Correct Answer: A. Because the remote sends a signal to the TV.

Explanation: A remote control sends a signal to the television. The TV receives the signal and performs the selected action.

Question 4 | General Science

Passage / Situation: A rainbow appears in the sky after sunlight passes through water droplets in the air.

Question: Why do we see many colours in a rainbow?

- A. Because sunlight splits into different colours when it passes through water droplets.
- B. Because water changes into many colours in the sky.
- C. Because clouds create all the colours.
- D. Because the Sun itself is made of only rainbow colours.

Correct Answer: A. Because sunlight splits into different colours when it passes through water droplets.

Explanation: Sunlight contains many colours. Water droplets bend and split the light, so we see the colours of a rainbow.

Question 5 | General Science

Passage / Situation: Fog is seen outside on a chilly morning.

Question: Why does fog form?

- A. Because warm moist air cools and tiny water droplets form.
- B. Because water from the ground flies straight to the sky.
- C. Because it always rains at night.
- D. Because ice turns directly into gas.

Correct Answer: A. Because warm moist air cools and tiny water droplets form.

Explanation: Fog forms when water vapour in the air cools and condenses into tiny droplets near the ground.

Question 6 | General Science

Passage / Situation: A spoon placed in a glass of hot tea becomes warm after some time.

Question: Why does the spoon become warm?

- A. Because the tea cools down the spoon.
- B. Because heat from the tea moves to the spoon.
- C. Because the spoon takes in cold air.
- D. Because the tea sends a signal to the spoon.

Correct Answer: B. Because heat from the tea moves to the spoon.

Explanation: Heat moves from the hotter object to the cooler object. The hot tea transfers heat to the spoon.

Question 7 | General Science

Passage / Situation: Leaves on a tree move when wind blows.

Question: Why do the leaves move?

- A. Because moving air pushes the leaves.
- B. Because the tree is shaking by itself.
- C. Because the leaves want to fly.
- D. Because the leaves grow bigger in wind.

Correct Answer: A. Because moving air pushes the leaves.

Explanation: Wind is moving air. When moving air pushes against leaves, the leaves move.

Question 8 | General Science

Passage / Situation: A stone is dropped into water, and ripples spread on the water surface.

Question: Why does water make ripples when the stone is dropped?

- A. Because the stone disturbs the water and pushes it outward in waves.
- B. Because the stone changes the water into steam.
- C. Because the stone disappears in the water.
- D. Because the stone makes the water vanish.

Correct Answer: A. Because the stone disturbs the water and pushes it outward in waves.

Explanation: When the stone hits water, it disturbs the surface and creates waves that spread outward as ripples.

Question 9 | General Science

Passage / Situation: A lamp lights up when it is plugged into an electric socket.

Question: Why does the lamp light up?

- A. Because electricity flows through the wire to the bulb.
- B. Because the lamp sends light by itself without power.
- C. Because the lamp is already bright.
- D. Because water makes the lamp shine.

Correct Answer: A. Because electricity flows through the wire to the bulb.

Explanation: When plugged in, electricity flows through the circuit and reaches the bulb, making it glow.

Question 10 | General Science

Passage / Situation: Streetlights turn on at night and turn off in the morning.

Question: Why do many streetlights turn on at night?

- A. Because sensors or timers help them turn on when it gets dark.
- B. Because lights like the night better.
- C. Because wind turns them on.
- D. Because the Moon controls all streetlights.

Correct Answer: A. Because sensors or timers help them turn on when it gets dark.

Explanation: Many streetlights use sensors or timers to detect darkness and switch on automatically.

Section B - Visual Reasoning and Environment

Question 11 | Visual Reasoning and Environment

Passage / Situation: Consider the following plants: cactus, fern, sunflower, and mushroom.

Question: Which plant usually needs the most sunlight to grow well?

- A. Cactus
- B. Fern
- C. Sunflower
- D. Mushroom

Correct Answer: C. Sunflower

Explanation: A sunflower is a sun-loving plant and grows best with plenty of direct sunlight.

Question 12 | Visual Reasoning and Environment

Passage / Situation: Consider these animals: eagle, pigeon, duck, and bat.

Question: Which animal is best known for soaring very high in the sky?

- A. Eagle
- B. Pigeon
- C. Duck
- D. Bat

Correct Answer: A. Eagle

Explanation: Eagles are strong birds that can soar high in the sky using broad wings and air currents.

Question 13 | Visual Reasoning and Environment

Passage / Situation: Consider the options: tree, car, factory, and house.

Question: Which option helps reduce pollution by cleaning the air?

- A. Tree
- B. Car
- C. Factory
- D. House

Correct Answer: A. Tree

Explanation: Trees absorb carbon dioxide and release oxygen. They also help make air cleaner.

Question 14 | Visual Reasoning and Environment

Passage / Situation: Consider these water bodies: ocean, river, lake, and swimming pool.

Question: Which is a natural fresh-water source that can be treated for drinking?

- A. Ocean
- B. River
- C. Lake
- D. Swimming pool

Correct Answer: B. River

Explanation: Rivers usually contain fresh water. It should be cleaned or treated before drinking.

Question 15 | Visual Reasoning and Environment

Passage / Situation: Consider these animals: polar bear, giraffe, zebra, and lion.

Question: Which animal is most likely to live in a very cold climate?

- A. Polar bear
- B. Giraffe
- C. Zebra
- D. Lion

Correct Answer: A. Polar bear

Explanation: Polar bears have thick fur and fat that help them survive in cold Arctic regions.

Question 16 | Visual Reasoning and Environment

Passage / Situation: Consider these choices: leaking tap, rainwater harvesting system, garden hose, and watering can.

Question: Which choice helps save water?

- A. Leaking tap
- B. Rainwater harvesting system
- C. Garden hose
- D. Watering can

Correct Answer: B. Rainwater harvesting system

Explanation: Rainwater harvesting collects and stores rainwater so that it can be reused later.

Question 17 | Visual Reasoning and Environment

Passage / Situation: Consider these resources: wind, coal, sunlight, and trees.

Question: Which of these is a non-renewable resource?

- A. Wind
- B. Coal
- C. Solar energy
- D. Tree

Correct Answer: B. Coal

Explanation: Coal takes millions of years to form and cannot be replaced quickly, so it is non-renewable.

Question 18 | Visual Reasoning and Environment

Passage / Situation: Consider these animals: frog, fish, dolphin, and camel.

Question: Which animal does not need to live in water?

- A. Frog
- B. Fish
- C. Dolphin
- D. Camel

Correct Answer: D. Camel

Explanation: A camel is a land animal adapted to dry desert conditions. Fish and dolphins live in water, and frogs need water for part of their life cycle.

Question 19 | Visual Reasoning and Environment

Passage / Situation: A school is teaching students how to sort waste correctly.

Question: Which object should be placed in a plastic recycling bin?

- A. Plastic bottle
- B. Banana peel
- C. Food leftover
- D. Wet tissue

Correct Answer: A. Plastic bottle

Explanation: A clean plastic bottle can be recycled. Food waste and wet tissues should not be placed in a plastic recycling bin.

Question 20 | Visual Reasoning and Environment

Passage / Situation: A class is separating paper, plastic, glass, and metal waste for recycling.

Question: Which bin is best for recyclable items such as clean paper and plastic?

- A. General trash bin
- B. Recycling bin
- C. Compost bin
- D. Open pile on the ground

Correct Answer: B. Recycling bin

Explanation: A recycling bin is used for clean recyclable materials. Waste should never be thrown openly on the ground.

Section C - Earth and Universe

Question 21 | Earth and Universe

Passage / Situation: The planets in our solar system rotate at different speeds.

Question: Which planet has the longest day?

- A. Earth
- B. Saturn
- C. Mars
- D. Venus

Correct Answer: D. Venus

Explanation: Venus has the longest day because it takes about 243 Earth days to rotate once.

Question 22 | Earth and Universe

Passage / Situation: Planets have different colours and surface features.

Question: Which planet is known as the Red Planet?

- A. Earth
- B. Jupiter
- C. Mars
- D. Moon

Correct Answer: C. Mars

Explanation: Mars is known as the Red Planet because iron-rich dust on its surface gives it a reddish colour.

Question 23 | Earth and Universe

Passage / Situation: Some planets have many natural satellites called moons.

Question: Which planet currently has the most confirmed moons?

- A. Saturn
- B. Earth
- C. Uranus
- D. Jupiter

Correct Answer: A. Saturn

Explanation: Saturn currently has the highest number of confirmed moons among the planets. New moon discoveries can update this count over time.

Question 24 | Earth and Universe

Passage / Situation: The planets move around the Sun at different distances.

Question: Which planet is closest to the Sun?

- A. Earth
- B. Mercury
- C. Mars
- D. Venus

Correct Answer: B. Mercury

Explanation: Mercury is the closest planet to the Sun. Note: Venus is the hottest planet because of its thick atmosphere, but Mercury is the closest.

Question 25 | Earth and Universe

Passage / Situation: The solar system has planets of many sizes.

Question: Which planet is the largest in the solar system?

- A. Earth
- B. Saturn
- C. Mars
- D. Jupiter

Correct Answer: D. Jupiter

Explanation: Jupiter is the largest planet in the solar system.

Section D - Environmental Case Studies

Question 26 | Environmental Case Study

Passage / Situation: Lila visited a forest and noticed that some trees had thick leaves, especially in hot places.

Question: Why do trees in hot areas often have thick leaves?

- A. To reduce water loss and protect the plant from strong sunlight.
- B. To get more water from the air.
- C. To help the tree breathe faster.
- D. To make the tree grow taller immediately.

Correct Answer: A. To reduce water loss and protect the plant from strong sunlight.

Explanation: Thick leaves can help plants reduce water loss and survive in hot conditions.

Question 27 | Environmental Case Study

Passage / Situation: Ravi noticed unusual weather: some days were very hot, while other days brought unexpected rain and flooding.

Question: How can climate change affect human life?

- A. People may need to move because of floods, droughts, or unsafe living conditions.
- B. People will always feel warm everywhere.
- C. It affects only animals and never humans.
- D. It makes the weather the same every day.

Correct Answer: A. People may need to move because of floods, droughts, or unsafe living conditions.

Explanation: Climate change can increase extreme weather such as floods and droughts, which can affect homes, food, water, and safety.

Question 28 | Environmental Case Study

Passage / Situation: Sara lives in a village where many people use firewood for cooking. Her teacher explained that smoke from burning firewood can harm the air.

Question: What is one effect of burning firewood on the environment?

- A. It makes the air cleaner.
- B. It can create harmful gases and smoke that pollute the air.
- C. It helps trees grow faster.
- D. It cools the climate instantly.

Correct Answer: B. It can create harmful gases and smoke that pollute the air.

Explanation: Burning firewood produces smoke and gases that can pollute the air and affect health.

Question 29 | Environmental Case Study

Passage / Situation: Priya lives in a city with many cars on the road. She notices that the air sometimes looks dirty.

Question: How do too many cars affect the environment?

- A. They clean the air.
- B. They help plants grow quickly.
- C. They release gases that can pollute the air.
- D. They create fresh oxygen for the environment.

Correct Answer: C. They release gases that can pollute the air.

Explanation: Cars release exhaust gases that can increase air pollution and harm the environment.

Question 30 | Environmental Case Study

Passage / Situation: Amir visits a beach and notices plastic bottles and bags near the water. His grandfather explains that plastic can harm sea animals.

Question: What happens when plastic waste enters the ocean?

- A. It helps fish swim faster.
- B. It harms sea animals and pollutes the water.
- C. It cleans the water completely.
- D. It helps the water stay warm.

Correct Answer: B. It harms sea animals and pollutes the water.

Explanation: Plastic waste can injure sea animals, be eaten by them by mistake, and pollute ocean water.

Section E - Achievers Section: Safety and Sustainability

Question 31 | Achievers Section



Passage / Situation: Ravi trips in the playground and gets a small cut on his knee.

Question: What should Ravi do for a small cut?

- A. Leave it uncovered.
- B. Apply a clean bandage after cleaning the wound.
- C. Keep running without stopping.
- D. Ignore it and continue playing.

Correct Answer: B. Apply a clean bandage after cleaning the wound.

Explanation: A small cut should be cleaned and covered with a clean bandage to help stop bleeding and reduce the chance of infection.

Question 32 | Achievers Section



Passage / Situation: Meera bumps her elbow against a wall. It swells and hurts.

Question: What is a good first-aid action for swelling after a bump?

- A. Give ice cream to the injured person.
- B. Place an ice pack wrapped in cloth on the swollen area.
- C. Make the person run around.
- D. Tell the person to ignore the pain.

Correct Answer: B. Place an ice pack wrapped in cloth on the swollen area.

Explanation: A cold pack can help reduce swelling and pain after a minor bump or bruise.

Question 33 | Achievers Section



Passage / Situation: In class, students discuss how to reduce pollution. Sara suggests planting more trees.

Question: Why is planting more trees important for saving the planet?

- A. Trees absorb carbon dioxide and release oxygen.
- B. Trees block all sunlight from reaching Earth.
- C. Trees are food for all animals.
- D. Trees are only used for decoration.

Correct Answer: A. Trees absorb carbon dioxide and release oxygen.

Explanation: Trees help clean the air by absorbing carbon dioxide and releasing oxygen.

Question 34 | Achievers Section



Passage / Situation: Rahul says that recycling paper and plastic can help the planet.

Question: Why is recycling important?

- A. It helps reduce waste and reuse materials.
- B. It makes the planet warmer.
- C. It causes more pollution.
- D. It takes up more space in landfills.

Correct Answer: A. It helps reduce waste and reuse materials.

Explanation: Recycling reduces waste, saves resources, and helps keep useful materials out of landfills.

Question 35 | Achievers Section


Passage / Situation: Anya explains that people should reduce plastic use and carry reusable bags.

Question: Why should we reduce plastic use?

- A. Plastic waste can harm the environment and animals.
- B. Plastic is always easy to recycle.
- C. Plastic is not harmful at all.
- D. Plastic makes the planet cooler.

Correct Answer: A. Plastic waste can harm the environment and animals.

Explanation: Plastic waste can take a long time to break down and can harm animals, especially in rivers and oceans.

Section-wise Learning Summary

Section	Question Range	Learning Skill Developed
General Science and Everyday Phenomena	1-10	Understanding heat, light, air, motion, electricity, water, and daily observations.
Visual Reasoning and Environment	11-20	Identifying plants, animals, resources, pollution-reduction practices, and waste sorting.
Earth and Universe	21-25	Recognising planets, the Sun, moons, and basic solar-system facts.
Environmental Case Studies	26-30	Applying science to climate, air pollution, firewood use, vehicles, and plastic waste.
Achievers Section	31-35	Using science for safety, first aid, recycling, tree planting, and responsible living.

Quick Answer Key

Q.No	Ans	Q.No	Ans	Q.No	Ans	Q.No / Ans
1	B	10	A	19	A	28: B
2	A	11	C	20	B	29: C
3	A	12	A	21	D	30: B
4	A	13	A	22	C	31: B
5	A	14	B	23	A	32: B

Q.No	Ans	Q.No	Ans	Q.No	Ans	Q.No / Ans
6	B	15	A	24	B	33: A
7	A	16	B	25	D	34: A
8	A	17	B	26	A	35: A
9	A	18	D	27	A	

SCO International Olympiad Preparation Note

This solved paper is designed for guided practice after students attempt the questions independently.

Teachers and schools may use the explanations for classroom discussion, revision sessions, and concept reinforcement.

Students should focus not only on the correct option, but also on the scientific reason explained below each answer.