



**INTERNATIONAL  
FSP CONTESTS**

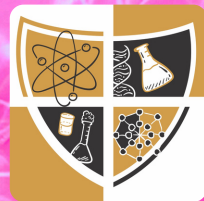


**FSP  
SCIENCE  
CONTEST  
QUESTION  
BOOKLET**

**Volume-23**

**GRADE 5 & 6  
VIBRANT YOUNGSTERS**

**EXHIBIT YOUR SKILLS TO THE WORLD**



**Time Allowed 90 minutes  
Maximum Marks :90**

## INSTRUCTIONS FOR THE EXAMINATION INVIGILATORS

- 1). Invigilation must be carried out promptly.
- 2). Don't start attempting the paper until instructed by the invigilator.
- 3). Carefully recheck your name, father name, school name, address etc. at the bubble sheet/answer sheet.
- 4). Record all answers on the bubble sheet only, select best answer from the four given options and mark only one option in each question.
- 5). Use blue/black ink to fill up the circles for your answers on the bubble sheet use of lead pencil is not allowed.
- 6). Use of any helping material including cell phones and electronic devices is strictly prohibited.
- 7). Every correct answer earns three points. there would be negative marking, one point would be deducted for every incorrect answer.
- 8). Candidates may not leave the examination room unescorted for any reason, and this includes using the washroom.
- 9). No materials or electronic devices shall be brought in to the room.
- 10). There are five categories of the contest as under:
  - A Vibrant youngsters Grade 1 & 2
  - B Vibrant youngsters Grade 3 & 4
  - C Vibrant youngsters Grade 5 & 6
  - D Vibrant youngsters Grade 7 & 8
  - E Vibrant youngsters Grade 9 & 10/0-levels
- 11). Only registered students can participate in the contest.
- 12). No candidate shall take out of the hall any answer book(s) or part of an answer book, whether used or unused, or other supplied material.
- 13). If a participant does not understand a word or phrase on the exam paper, neither examiner nor invigilator is permitted to answer.
- 14). For information about upcoming contests or providing valuable feedback, please visit [www.fspcompetitions.org](http://www.fspcompetitions.org)
- 15). Any academic misconduct or malpractice must be reported to FSP vibrant youngsters at [info@fspcompetitions.org](mailto:info@fspcompetitions.org)

**Q1. While visiting his uncle's workshop, Hamza heard a loud hum coming from a working generator. The generator was producing electricity to power the tools. The humming sound is an example of \_\_\_\_\_ converting into sound energy.**

- A. Heat energy
- B. Electrical energy
- C. Light energy
- D. Chemical energy

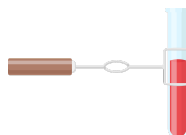
**Q2: Sara needed to heat a liquid safely in science class. She wanted a container that could hold liquid, stand upright, and be heated evenly over a flame.**

**Which laboratory tool should she choose?**

A. Dropper



B. Testtube holder



C. Conical flask



D. Thermometer



**Q3: A parcel weighs 25 kilograms.**

**What is its mass in grams?**

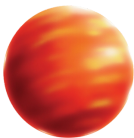
- A. 2,500 g
- B. 25,000 g
- C. 250,000 g
- D. 250 g



**Q4: On a clear evening, Bilal noticed a very bright object in the sky that did not twinkle like the stars. His sister explained that it shines because it reflects sunlight and is often called the “Evening Star.”**

**Which planet was Bilal most likely observing?**

**A. Mars**



**B. Mercury**



**C. Venus**



**D. Saturn**



**Q5: During a rainforest documentary, Aisha learned that some frogs have bright colors to warn predators that they are poisonous. Bright warning colors are an example of:**

- A. Metamorphosis
- B. Adaptation
- C. Migration
- D. Camouflage



**Q6: When air is pumped into a bicycle tire, it becomes firm.**

**Why does the tire expand and become tight?**

- A. Air particles stop moving.
- B. Air particles press against the inside walls.
- C. Air disappears inside.
- D. Air becomes solid.



**Q7: Noman wants to test whether heavier toy cars roll farther than lighter toy cars down the same ramp.**

**Which question can he investigate?**

- A. Do blue cars move faster than red cars?
- B. Does a heavier toy car roll farther than a lighter toy car?
- C. Do wooden ramps last longer than plastic ramps?

D. None of these



**Q8: During a concert, sound waves traveled through the air to reach the audience.**

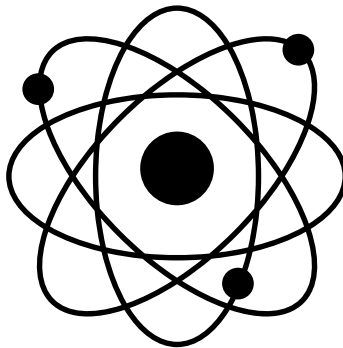
**Which statements are true?**

- A. Air is the medium through which sound travels.
- B. Sound carries energy.
- C. Air particles travel all the way from the stage to the audience.
- D. Vibrations produce sound waves.

**Q9: Everything around us — water, air, rocks, and even our bodies — is made up of tiny particles called atoms.**

**Which statement is true?**

- A. Only solids are made of atoms.
- B. Atoms are visible to the naked eye.
- C. All matter is made of atoms.
- D. Atoms have no mass.



**Q10: Fatima often skips meals and feels tired and weak during sports practice.**

**This condition is best described as:**

- A. Exercise
- B. Malnutrition
- C. Digestion
- D. Respiration

**Q11: Plants placed near a sunny window grow taller and healthier than plants kept in a dark cupboard because they need:**

A. Soil



B. Water



C. Air



D. Sunlight



**Q12: When will a person's shadow be the shortest?**

A. Early morning

B. Late afternoon

C. At noon

D. At sunset

**Q13. Meteorologists study weather patterns to predict storms.**

- 1) Which statements are correct?
- 2) Warm and cold air masses can collide.
- 3) Scientists can predict weather by studying air conditions.
- 4) Air has no effect on weather.

- A. 1 only
- B. 1 & 2
- C. 2 & 3
- D. None of these



**Q14: After a hot shower, tiny water droplets form on the mirror.**

**This happens because:**

- A. Water leaks through the glass.
- B. Steam condenses on the mirror.
- C. The mirror produces water.
- D. The air freezes

**Q15: Grass → Rabbit → Fox.**

**Why is the rabbit called a primary consumer?**

- A. It eats another consumer.
- B. It makes its own food.
- C. It eats a producer.
- D. It eats only meat



**Q16: On a topographic map, areas shaded green usually represent:**

- A. Water bodies
- B. Forested land
- C. Desert
- D. Cities



**Q17: A raisin is placed in a concentrated sugar solution. What happens to the raisin and why?**

- A. It swells up because water enters the raisin through osmosis
- B. It shrinks because water leaves the raisin through osmosis
- C. It remains unchanged because osmosis doesn't occur
- D. It dissolves because of the sugar concentration

**Q18: A student tested whether polishing a desk makes objects slide faster across it.**

**What is the purpose of this experiment?**

- A. To test desk color
- B. To determine if polishing reduces friction
- C. To make the desk shiny
- D. To measure weight



**Q19: Why is a wool sweater better than a thin cotton shirt in winter?**

- A. Wool is heavier
- B. Wool traps body heat
- C. Wool absorbs sunlight
- D. Cotton is waterproof



**Q20: Using a classification key helps scientists:**

- A. Increase plant growth
- B. Identify organisms
- C. Measure temperature
- D. Change species



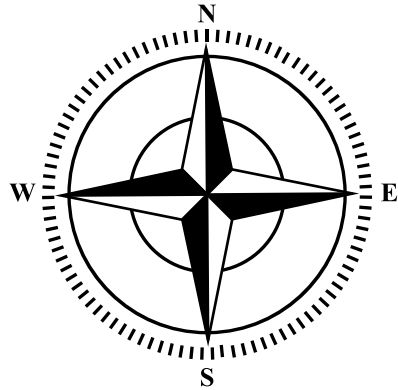
**Q21: A spoon in a glass of water appears bent because:**

- A. The spoon is melting
- B. Light bends when it passes from air to water
- C. Water pushes the spoon
- D. The glass is curved



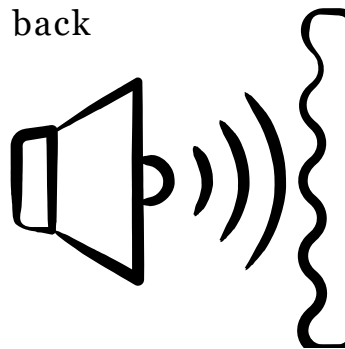
**Q22: A compass needle points north because:**

- A. The Earth acts like a magnet
- B. The wind pushes it
- C. The sun attracts it
- D. Water pulls it



**Q23. An echo is heard when:**

- A. Another person repeats your voice
- B. Sound waves reflect off a surface
- C. Wind carries your voice back
- D. You imagine it



**Q24: When you push a wall, the wall pushes back.**

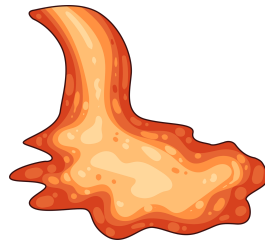
**This is an example of:**

- A. Gravity
- B. Friction
- C. Balanced forces
- D. Action and Reaction forces



**Q25: Melted rock below Earth's surface is called magma. When it reaches the surface, it is called:**

- A. Rock
- B. Lava



- C. Soil
- D. Ash



**Q26: When a basketball hits the ground and bounces up, it happens because of:**

- A. Gravity pulling upward
- B. Air pushing it
- C. The ground exerting an upward force
- D. Heat energy

**Q27. Ahmed learned to swim after taking lessons from a coach. Swimming is an example of:**

- A. An inherited trait
- B. An acquired skill
- C. A mutation
- D. An instinct



**Q28: Breaking a glass and melting ice have what in common?**

- A. Both are chemical changes
- B. Both are physical changes
- C. Both require burning
- D. Both form new substances



**Q29: After sliding down a plastic slide, Mariam touched a metal pole and felt a small shock.**

**This happened because:**

- A. The metal was hot
- B. Static electricity built up on her body
- C. The pole was broken
- D. She imagined it

**Q30: Ice cream melts faster in sunlight than in shade because:**

- A. It absorbs more heat energy
- B. It has more sugar
- C. It is lighter
- D. The cone is weaker







# ANSWER SHEET

## Grade 5 & 6

- |    |     |     |     |     |    |     |     |     |     |
|----|-----|-----|-----|-----|----|-----|-----|-----|-----|
| 1  | (A) | ●   | (C) | (D) | 16 | (A) | ●   | (C) | (D) |
| 2  | (A) | (B) | ●   | (D) | 17 | (A) | ●   | (C) | (D) |
| 3  | (A) | ●   | (C) | (D) | 18 | (A) | ●   | (C) | (D) |
| 4  | (A) | (B) | ●   | (D) | 19 | (A) | ●   | (C) | (D) |
| 5  | (A) | ●   | (C) | (D) | 20 | (A) | ●   | (C) | (D) |
| 6  | (A) | ●   | (C) | (D) | 21 | (A) | ●   | (C) | (D) |
| 7  | (A) | ●   | (C) | (D) | 22 | ●   | (B) | (C) | (D) |
| 8  | (A) | ●   | (C) | (D) | 23 | (A) | ●   | (C) | (D) |
| 9  | (A) | (B) | ●   | (D) | 24 | (A) | (B) | (C) | ●   |
| 10 | (A) | ●   | (C) | (D) | 25 | (A) | ●   | (C) | (D) |
| 11 | (A) | (B) | (C) | ●   | 26 | (A) | (B) | ●   | (D) |
| 12 | (A) | (B) | ●   | (D) | 27 | (A) | ●   | (C) | (D) |
| 13 | (A) | (B) | ●   | (D) | 28 | (A) | ●   | (C) | (D) |
| 14 | (A) | ●   | (C) | (D) | 29 | (A) | ●   | (C) | (D) |
| 15 | (A) | (B) | ●   | (D) | 30 | ●   | (B) | (C) | (D) |



# International FSP Contests



[www.fspcompetitions.org](http://www.fspcompetitions.org)



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