

### **International FSP Contests**

2024 QUESTION BOOKLET

# FSP SCIENCE Contest



GRADE 3 & 4

VIBRANT YOUNGSTERS

Time Allowed: 90 Minutes

Maximum Marks: 90

#### WRITTEN DIRECTIONS FOR THE CONTEST

- 1) Wait till the invigilator gives the all-clear before beginning the contest.
- 2) Examine your name, father's name, school name, address, and other details one last time on the bubble sheet and answer page.
- 3) Only record your responses on the bubble sheet. Choose the best response from the four alternatives provided, and only one option should be marked per question.
- 4) Fill in the circles on the bubble sheet with blue or black ink; lead pencils are not permitted.
- 5) It is completely forbidden to use any kind of assistance, including cell phones and technological devices.
- 6) Three points are awarded for each right response. Negative marking would occur. A single point would be subtracted for each wrong response.
- 7) No justification may be given for an unaccompanied candidate to leave the examination room, including to use the restroom.
- 8) No objects, including electrical devices, are allowed within the room.
- 9) The competition is divided into the following five categories:
  - 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
- 10) The contest is only open to enrolled students.
- 11) No candidate may remove any provided materials, including answer books, from the hall, even if they are partially filled in or utilized.
- 12) Neither the examiner nor the invigilator may respond if a participant does not understand a word or phrase on the exam paper.
- 13) Please visit www.fspcompetitions.org to learn about future competitions or to offer insightful comments.
- 14) Vibrant youngsters FSP must receive reports of any academic misconduct or malpractice at info@fspcompetitions.org.

Read the rhyme carefully and answer the following questions.

" I see you are a seed. Tell me, what you need? " I need soil to grow. I can grow in water too. Water makes me wet. Air for my leaves to get carbon dioxide. Space for my roots to spread. Then I grow into a green plant.

What is the color of plant describe in the rhyme?



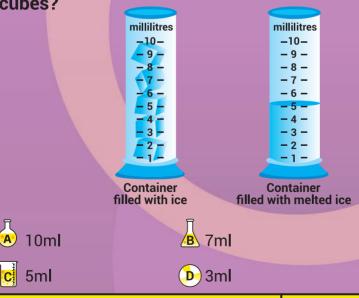






#### **Q-2**

A container was filled with ice cubes, The Container was left outside until the ice cubes melted. Based on the picture, how much water came from the melted ice cubes?



Ahmed is a poor man, who lives in a village with his son Ali and wife Mariyam. He owns a piece of land and a Tonga. He is illitrate and has no sense of earning money. His son Ali wants to study but because of no source of income Ahmed cannot afford to send him to school. As a village's land lord you want to make Ahmed aware that he can earn money with whatever he has. So what will you tell him so that he can earn money for his son?



Ahmed can grow fruits and vegetables to sell



Ahmed can use Tonga to carry fruits and vegetables to the



Ahmed can go to Mumbai to earn money.



#### Q-4

Different countries have different specialties in terms of food, clothing, language and culture. Anita experienced all this when she went on a vacation with her family to a place which is famous for its Pizzas and pastas. Identify the country?









#### Match the following:

List - I			List - II		
A.	Solids	1	Molecules are little far away		
B.	Water	2	Molecules are loosely packed		
C.	Liquids	3	Tightly packed molecules		
D.	Gases	4	Exhibit all three states		

A-3, B-4, C-1, D-2

A-1, B-2, C-3, D-4

C A-4, B-3, C-2, D-1

D A-1, B-2, C-4, D-3

#### Q-6

Shiela made a cup of tea for herself. But her phone rang and she started talking on the phone. In the mean while she covered her mug of tea with a lid. After ten minutes, she removed the lid to drink tea. She observed small water droplets on the inner side of the lid. Now which process is shown in the above paragraph?

Melting

Precipitation

**Evaporation** 

Condensation

#### **Q-7**

The given transformation takes place in

Light energy ► Electrical energy

A Electric bulb.

B Electric heater.

C Batterycell.

Solar cell.

The following diagram shows a man pushing a table.



Now the man is applying \_\_\_\_ on the table.



force



muscles

Q-9

What is the energy change that takes place when an electric bulb is switched on?

- Electrical energy is converted into heat and light energy.
- B Electrical energy is converted into chemical energy.
- Electrical energy is converted into sound energy.
- D Electrical energy is converted into mechanical energy.

Q-10

Monsoon is the time when we need to take extra care of our body to keep it free from diseases. But your younger brother Rahul is very careless and lazy. He never feels like keeping his surroundings and food clean. So he can fall prey to diseases like typhoid etc. You are worried about his health. What basic things you will ask him to do.

(A) Wash your hands properly before and after eating food.

Do not let the garbage collect in your surroundings as it attracts the flies which contaminate the food.

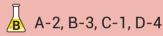
- Always keep your body clean.
- All of these

Match the following:

List - I		List - II	
A.	We should keep the eatables	1	Clean our blood.
B.	Our kidneys	2	Fights against the diseases.
C.	Immune system of our body	3	Mosquito biting.
D.	Malaria is caused by	4	covered

A	A-1,	B-2,	C-3,	D
	Α-1,	D-Z,	U-J,	ט

C A-4, B-1, C-2, D-3



**D** A-3, B-1, C-4, D-2

#### Q-12

To maintain a balanced diet, it is important to include a variety of food groups. What is the key benefit of consuming a diet rich in omega-3 fatty acids?

- A Increase blood sugar levels
- Promote healthy brain function and reduce inflammation
- Provide a quick source of energy
- **D** Enhance the absorption of iron

#### Match column (I) with column (II).

Column - I		Column - II	
A.	Roots	1.	Supports the plant.
B.	Stem	2.	Reproductive part of plant.
C.	Leaves	3.	Absorb water from soil.
D.	Flowers	4.	Food problem

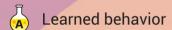
A A-1	B-2	C-3	D-4
0			

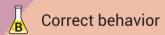
С	A-3	B-1	C-4	D-2
	, , ,		• .	

n	A-2	B-1	C-3	D-4
	A-Z	D-1	U-3	U-4

#### Q-14

Jake's cats eat food from a can. The cats come running into the kitchen when they hear the electric can opener. Now, each time Jake's mother opens a can of corn, the cats come running. This is an example of:







Instinct

A botanist is studying a rare plant species that thrives in arid environments. To simulate its natural habitat, the botanist needs to control the amount of \_\_\_ in the greenhouse, as excessive levels can lead to root rot and ultimately kill the plant.



A Humidity



Temperature



Light intensity



D Soil salinity

#### Q-16

The amount of force placed on an object that affects how tight or loose it is is called \_\_\_\_\_



A Tension



Speed



**c** Energy



D None of the above

Read the passage carefully and answer the following auestion.

What we eat and drink, and types of clothes we wear depends on weather. In summers, we like to drink something cold and in winters, we like to drink something hot. Fruits like mangoes, litchi watermelon are there in summer. In winter we get fruit like oranges, grapes, apples and guavas. Carrots, cabbage, green peas and radishes are winter vegetables. Cucumber pumpkin and bottle gourd are summer vegetables. Which of the following is a summer vegetable?



Peas



Raddish



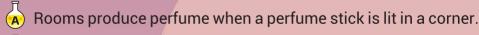
Carrot

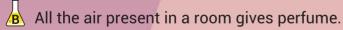


D) Bottle gourd

#### Q-18

Asma lit a perfume stick in the corner of a room. When she stood at the other corner, she smelled the perfume after sometime. What can we conclude from this?





Perfumes do not spread from one place to another.

All gases, including perfumes, have the property of spreading from one place to another.

A student took an unknown substance into a beaker. The substance took the shape of the beaker. Later he transferred the substance into a measuring cylinder. The substance took the shape of the cylinder but its volume remained the same. What is the state of this substance?



Solid



Gas



Liquid



All

#### Q-20

People over the age of 65 may have a poor appetite. What may be an effect of this?



Their nutritional intake take



The amount of exercise they



C Their sleep pattern



Their weight

#### Q-21

In adulthood, energy needs should balance with diet to prevent weight gain. Why is this?



A Because they have stopped growing.



Because they may not need as much food.

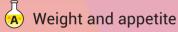


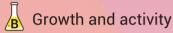
Because they may not be as active.

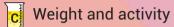


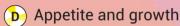
D Because they are working.

What are the most important factors that affect our nutritional requirements?



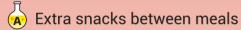


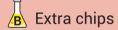




#### Q-23

Adolescents need extra energy and protein in their diet due to rapid growth and bodily changes. Which of the following would you recommend to provide this?





C A Big Mac after school

More chocolate

#### Q-24

Every country has its currency, known by a particular name. For example currency of USA is Dollar, currency of India is Rupee, and Currency of Japan is \_\_\_\_\_\_.







D Yen

When light pass through a certain objects and a shadow was formed, what property of light is clearly shown?



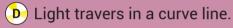
A Light travels in the opposite direction.



Light travels in straight line.



Light travels in any direction.



# EDUCATIONAL LEADERSHIP AWARDS 2024 FSP Mathematics Contest

#### INTERNATIONAL FSP CONTESTS

Inst Head Name	Job Title	Institution Name	City
Ms. Mehar Naz Hossain	Principal	The Elixir School	Karachi
Mrs. Shazia Nadeem	Principal	Army Public School and College	Islamabad
Mrs. Sayyeda Iram Naz	Principal	Army Public School Marala Garrison	Sialkot
Ms. Saba Quadri	Vice Principal	N003 - Satellite Town Campus Rawalpindi	Rawalpindi
Ms. Nadia Rashid Inam	Principal	Beaconhouse School System Jauhar Campus	Karachi
Ms. Qamar Zia	Principal	University Cambridge School	Faisalabad

Mr. Amin Ur Rehman Subhani	Principal	Fauji Foundation School & College	Multan
Mrs. Hina Iqbal	Principal	Fauji Foundation School	Haroonaba d
Mr. Muhammad Amir Akhlaq	Head	Beaconhouse School System (Boys Campus)	Okara
Col. Manzoor Hussain (Retd)	Principal	Fauji Foundation Education System	Gujar Khan
Dr. Rukhshanda Jabeen	Principal	Dhacss Seaview Campus	Karachi
Ms. Sobiya Rehan	Branch Head	Roots International Schools	Wah Cantt
Ms. Samia Munir	Acting Principal	Fauji Foundation Education System	Gujrat
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Col. Zakaullah Malik	Principal	Fauji N foundation College Basal	Mithial
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Dr. Sidra Shakeel	Principal	Army Public School & College Cherat Cantt	Nowshera
Ms. Shaista Amir	Principal	Center Of Excellence Girls	Hafizabad
Mrs. Riffat Naveed	Principal	Faisalabad Grammar School	Faisalabad
Ms. Ghazal Naheed	Principal	Fauji Foundation College	Khaur

## ANSWER SHEET GRADE 3 & 4

#### **Q.NO ANSWER**

- 1 A C C
- 2 A B D
- 3 A B C
- 4 A B C
- 5 B C D
- 6 A B C
- 7 A B C
- 8 A C D
- 9 B C D
- 10 (A) (B) (C) (D)
- 11 A B D
- 12 A C C
- 13 (A) (B) (D)
- 14 B C D
- 15 B C D

#### Q.NO ANSWER

- 16 B © D
- 17 A B C •
- 19 (A) (B) (D)
- 20 B C D
- 21 B C D
- 22 A O C D
- 23 B C D
- 24 A B C •
- 25 A C D



International FSP Contests



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www.fspcompetitions.org

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