



INTERNATIONAL  
**CATS CONTESTS**  
COMPETENCE & APTITUDE TESTING SERVICES  
**FASTEST GROWING CONTESTS IN PAKISTAN**

**QUESTION  
BOOKLET**

**GRADE 3 & 4  
KIDS**

Time Allowed: 75 Mins.  
Maximum Marks: 75

**2023**

**ICATS  
SCIENCE  
CONTEST**



# ICATS SCIENCE CONTEST 2023

## KIDS (GRADE 3 & 4)

**TIME ALLOWED : 75 MINUTES, MAXIMUM MARKS : 75**

**TOTAL QUESTIONS : 25 MCQS**

### INSTRUCTIONS

1. DON'T START ATTEMPTING THE PAPER UNTIL INSTRUCTED BY THE INVIGILATORS.
2. INSTRUCTIONS FROM THE EXAMINATION INVIGILATORS MUST BE CARRIED OUT PROMPTLY.
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, CALCULATORS 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. THERE ARE FIVE CATEGORIES OF THE CONTEST AS UNDER:
  - A. TODDLERS (GRADE 1 & 2)
  - B. KIDS (GRADE 3 & 4)
  - C. JUNIORS (GRADE 5 & 6)
  - D. JUVENILES (GRADE 7 & 8)
  - E. ADOLESCENTS (GRADE 9 & 10 / O-LEVELS)
10. REGISTERED STUDENTS CAN PARTICIPATE IN THE CONTEST.
11. 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.
12. IF A PARTICIPANT DOES NOT UNDERSTAND A WORD OR PHRASE ON THE EXAM PAPER, NEITHER EXAMINER NOR INVIGILATOR IS PERMITTED TO ANSWER.
13. FOR INFORMATION ABOUT UPCOMING CONTESTS OR PROVIDING VALUABLE FEEDBACK, PLEASE VISIT [WWW.CATSCONTESTS.ORG](http://WWW.CATSCONTESTS.ORG)
14. ANY ACADEMIC MISCONDUCT OR MALPRACTICE MUST BE REPORTED TO INTERNATIONAL CATS CONTESTS AT [INFO@CATSCONTESTS.ORG](mailto:INFO@CATSCONTESTS.ORG)

**Q1** Which property do these four objects have in common?



popcorn



pretzel



corn on the cob



pineapple

Select the best answer.

**A** blue

**B** bumpy

**C** slippery

**D** translucent

**Q2** Which material are these soccer shorts made of?

**A** wood

**B** ceramic

**C** polyester

**D** concrete



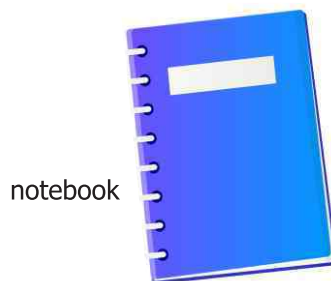
**Q3** Cleanliness, physical exercise, rest and sleep are a part of \_\_\_\_\_.

- A** Hygiene      **B** Social hygiene      **C** Personal hygiene      **D** None of these

**Q4** Which one of the following is an unhealthy habit?

- A** Sharing food      **C** Drinking boiled water  
**B** Bathing twice a day      **D** Eating without washing one's hand

**Q5** Which is a natural resource?



- A** tree      **B** cupcake      **C** umbrella      **D** notebook

**Q6** Which of the following statements is a prediction about the weather?

- A** It is beautiful outside. **C** It is going to rain today.  
**B** It was cloudy yesterday. **D** I wish it would snow.

**Q7** Which of the following are NON-RENEWABLE sources of energy?

- A** wind, water, sunlight **C** sunlight and water  
**B** water, wood, wind **D** coal, oil and natural gas

**Q8** What do these two changes have in common?

- water boiling on a stove
- breaking a piece of glass

- A** Both are physical changes. **C** Both are chemical changes.  
**B** Both are caused by heating. **D** Both are caused by cooling.

**Q9** Many stars are much brighter than the Sun. The star Polaris, also known as the North Star, is over 2,000 times as bright as the Sun!

But when viewed from Earth, the Sun looks brighter than any other star in the sky. Which of these models explains why?

- A** A room looks brighter as you turn on more lights.  
**B** A snowball gets bigger as it rolls down a hill.  
**C** A candle looks brighter the closer you stand to it.  
**D** A big dog barks louder than a small dog.

Q10



In this design, the door will not be strongly attracted by the red magnet. So, the door will not stay closed.



Kiran thinks she can fix the design by putting a new object on the door. She wants the new object and the red magnet to attract so the door will stay closed.

Which of the following objects will she use?

A



copper coin

C



aluminum pull tab

B



plastic button

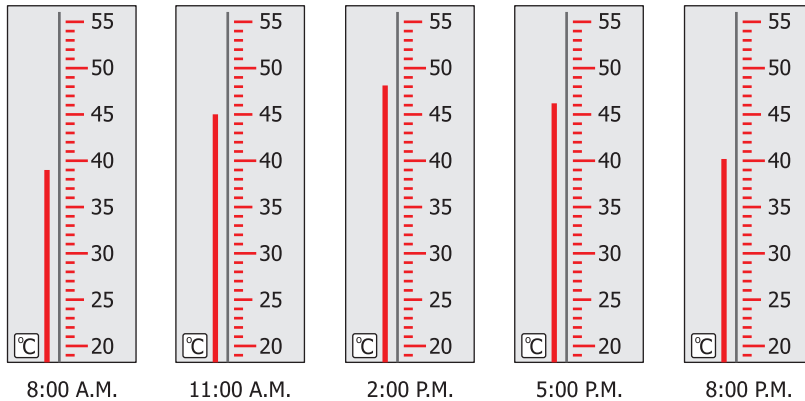
D



steel washer

Q11

Lahore, Pakistan has a warm, dry climate. The city had a heat wave in June 2007. The following temperature data was collected in Lahore during the heat wave on June 9.



At what time of the day the temperature was highest?

**A** 11:00 A.M.

**B** 2:00 P.M.

**C** 5:00 P.M.

**D** 8:00 P.M.

Q12

The following picture was taken after an earthquake.



What evidence of an earthquake does this picture show?

**A** There is a guard rail on each side of the road.

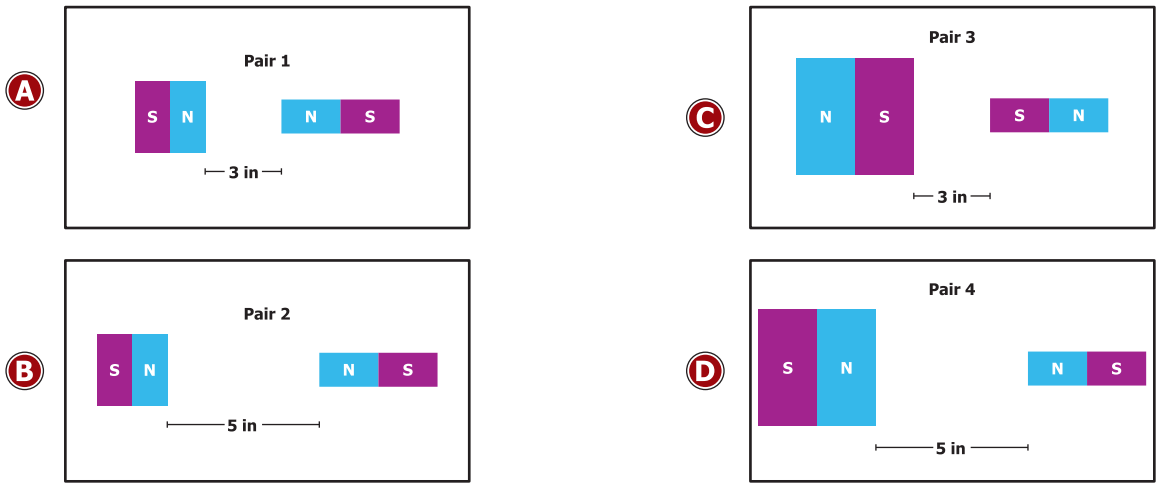
**B** There are buildings with broken windows.

**C** There are large cracks in the road.

**D** None of these.

**Q13** The images below show four pairs of magnets. The magnets in different pairs do not affect each other. All the magnets shown are made of the same material, but some of them are different sizes and shapes.

Think about the magnetic force between the magnets in each pair. Select the pair with the strongest magnetic force.



**Q14** Consider the following statements and select the correct option(s):

- (i) The people who neither can speak nor hear, they explain their words to others through gestures.
- (ii) The people who neither can speak nor hear, they always understand completely what the other person is saying by studying their lip-movements.
- (iii) The people who neither can speak nor hear like everyone, they can't be admitted in a government school.
- (iv) The people who neither can speak nor hear like everyone, they can only be admitted in a special type of school.

**A** (i) and (ii)

**B** (i) and (iii)

**C** Only (i)

**D** Only (iv)



**Q15** In windmill, electricity is produced from the energy of \_\_\_\_\_.

**A** Sun

**B** Water

**C** Coal

**D** Fast Wind

**Q16** Ahmed has built a toy car. He wants to make the car move on its own. He adds a battery, wires, a switch and a \_\_\_\_\_.

**A** Bulb

**B** Motor

**C** Seat

**D** Radio

**Q17** Observe the figures given below.



**How do these animals protect themselves from their enemies?**

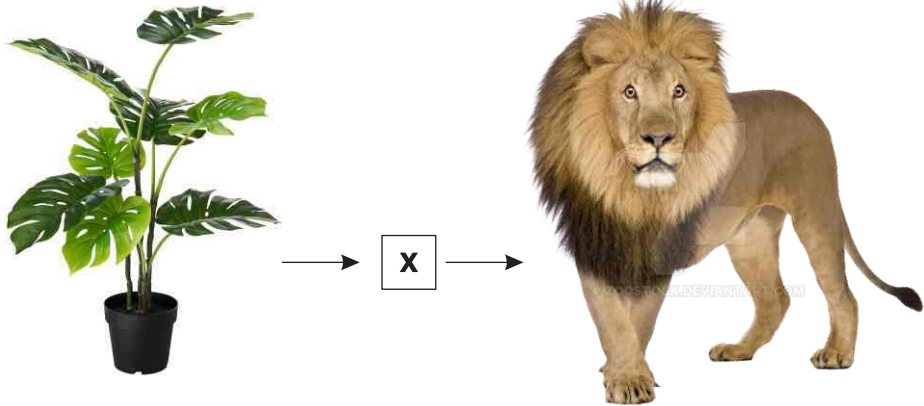
**A** They live in groups.

**C** They give off bad smell.

**B** They pretend to be dead.

**D** They attack their enemies with their claws.

**Q18** Observe the figure below.



The arrow sign ( $\rightarrow$ ) means "is eaten by".  
Which of the following animals can 'X' be?

**A** Frog

**B** Eagle

**C** Fox

**D** Deer

**Q19** Which of the following actions requires more energy?



**A** 1

**B** 2

**C** 3

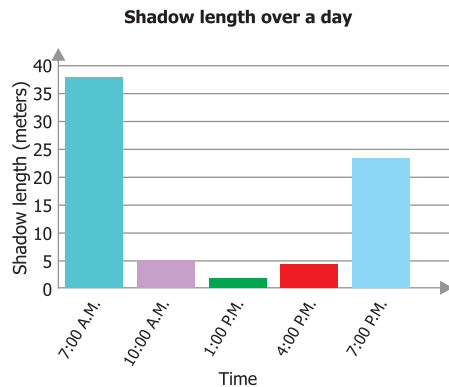
**D** 4

**Q20** There is a Japanese maple tree in Sarah's front yard. Sarah has noticed that the length and direction of the tree's shadow changes throughout the day.

One day in August, Sarah measured the length of the tree's shadow every three hours. She made a bar graph from her data.

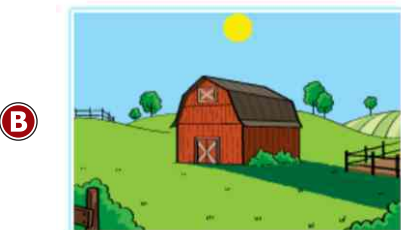
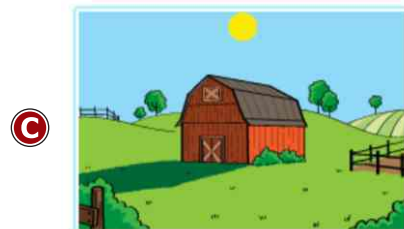
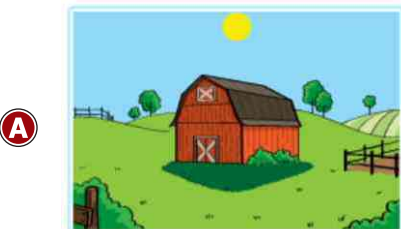
About how long was the shadow at 10:00 A.M.?

- A** 38 meters
- B** 23 meters
- C** 5 meters
- D** 2 meters



**Q21** Sarah learned a lot about shadows from observing the Japanese maple tree in her yard. She decided to apply what she learned to draw realistic pictures of her favorite places to visit. First, she wanted to draw the barn at her grandparents' farm.

Which of these best shows the barn's shadow at 12 'o' clock in the day?



**D** None of these

**Q22** Nadia lives near a river. The weather forecast says there will be many days of heavy rain. The rain may cause the river to flood. Nadia prepares for the rain by filling sandbags. She then builds a low wall of sandbags around her home.

Which statement best explains why Nadia is placing sandbags around her home?

- A** to stop the river from flooding near her home
- B** to stop lightning from striking her home during the storm
- C** to lower the chances that flood water will damage her home
- D** to lower the chances that there will be heavy rains at her home



**Q23** Below are three examples of using energy from natural resources. Select the use of energy that did not add to air pollution.

**A**

An outdoor stove burned propane, a fuel made from natural gas.

**B**

Wind moved a hang glider through the air.

**C**

An engine burned gasoline made from petroleum oil to power a lawnmower.

**D** All of the above.

**Q24** A bearberry grows close to the ground. It has tough, waxy leaves to trap water during cold winters. It has bright red berries that bears eat.

Where does the bearberry live?

**A**



coral reef

**C**



savanna

**B**



hot desert

**D**



northern forest

**Q25**

Indian flying foxes live in parts of India, Nepal, Pakistan, Bangladesh, Bhutan, the Maldives, Sri Lanka and China.

The yellow areas on this map show where Indian flying foxes live.

Complete the below given sentence.

Indian flying foxes live mostly in the \_\_\_\_\_ part of Asia.

**A** western

**B** southern

**C** northern

**D** eastern





National Toppers  
ICATS  
Art Contest  
2023

Student Name	Father Name	Grade	School
ZOHA SUALEH	MIR M. SHAH SUALEH	1	FUTURE WORLD SCHOOL
SHAZIL ASAF	ASAF JAVED	1	ARMY PUBLIC SCHOOL & COLLEGE FOR BOYS
MUHAMMAD WALEE KHAN	FAHEEM ASHRAF	2	NUST CREATIVE LEARNING SCHOOL & COLLEGE
RAYYAN IRFAN	DR. MUHAMMAD YOUSAF	3	DHA JUNIOR SCHOOL
ANABIYA	HUSSAIN ABID	3	APS&C PMA
MAHNOOR	GHULAM MUSTAFA	4	AES SCHOOL FOR GIRLS
MEERAB KHAN	ADNAN ASIF KHAN	5	LAHORE GRAMMAR SCHOOL (JUNIOR SECTION)
MAHEEN MUNIR	MUNIR KHAN	6	FAUJI FOUNDATION SCHOOL
TALHA ALI KHAN	SADAQAT ALI	7	JOINT STAFF PUBLIC SCHOOL & COLLEGE
AREESHA MOBEEN	MOBEEN TAHIR	8	LAHORE GRAMMAR SCHOOL
ASMA NAEEM	NAEEM AMIN	9	ALLAMA IQBAL PUBLIC GIRLS HIGH SCHOOL
SUMERA KHAN	IMRAN KHAN	10	AES SCHOOL FOR GIRLS

*Congratulations*

National Toppers  
ICATS  
Creative Writing  
Contest  
2023

Student Name	Father Name	Grade	School
FAARIS ALI QURESHI	DANYAL QURESHI	1	LAHORE GRAMMAR SCHOOL
KHADIIJA AHSAN	AHSAN MAJEED	2	LAHORE GRAMMAR SCHOOL
ZAYYAN MUSTAFA	QAMAR MUSTAFA	3	ARMY PUBLIC SCHOOL (BOYS & GIRLS)
SIBTAIN ALI KHAN	FAWAD ALI PATHAN	4	PAK-TURK MAARIF INT'L SCHOOLS & COLLEGES
SAARIM THARANI	IMRAN NOORALI THARANI	5	AGA KHAN SCHOOL GARDEN
M. AHMED JADOON	ELLI RAZA JADOON	6	THE CITY SCHOOL (RAVI CAMPUS)
ARISHA MAZHAR	MAZHAR ALI	7	KOHSAR CHILDREN'S ACADEMY
VERDAH SAHAR USMAN	USMAN TARIQ SHEIKH	7	LAHORE GRAMMAR SCHOOL
SALEHA SHAHID	SHAHID WAHEED	8	THE CITY SCHOOL (PESHAWAR CAMPUS)
HALEEMA USMAN	USMAN AHMED	8	TNS BEACONHOUSE
UMAIMA AIMEN	MUBASHIR MUSTAFA	9	RANGERS PUBLIC SCHOOL
RANIA ZAKIA MALIK	TAHIR NAEEM MALIK	10	ISLAMABAD COLLEGE OF ARTS AND SCIENCES

*Congratulations*

Compete if you are the best

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