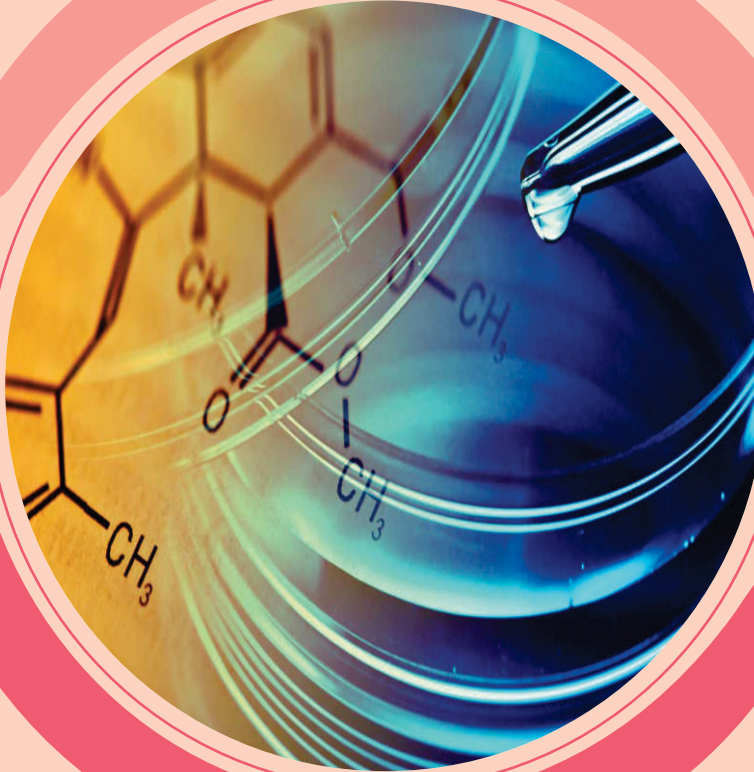




ICATS SCIENCE

Contest 2017

KIDS GRADE 3 & 4



INTERNATIONAL
CATS CONTESTS
COMPETENCE & APTITUDE TESTING SERVICES

ICATS SCIENCE CONTEST 2017

KIDS (GRADE 3 & 4)

TIME ALLOWED : 75 MINUTES

MAXIMUM MARKS : 75

TOTAL QUESTIONS : 25 MCQS

INSTRUCTIONS

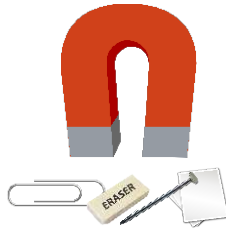
1. DON'T START ATTEMPTING THE PAPER UNTIL INSTRUCTED BY THE INVIGILATORS.
2. INSTRUCTIONS FROM THE EXAMINATION INVIGILATORS MUST BE CARRIED OUT PROMPTLY.
3. WRITE YOUR NAME, FATHER NAME, SCHOOL NAME, ADDRESS ETC AT THE BUBBLE SHEET (ANSWERSHEET) ONLY.
4. RECORD ALL ANSWERS ON THE BUBBLE SHEET ONLY. SELECT 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 INTO THE ROOM.
10. 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)
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.CATSCONTESTS.ORG
15. ANY ACADEMIC MISCONDUCT OR MALPRACTICE MUST BE REPORTED TO INTERNATIONAL CATS CONTESTS AT INFO@CATSCONTESTS.ORG

- Q1.** A student classified the following materials. What label did the student most likely place on boxes A and B?



- A** metal and nonmetal
B living and nonliving
C land based and water based
D heavy and light

- Q2.** Four items are placed at the same distance from the magnet. Which one of the objects will be the easiest for the magnet to pull?



- A** a 1-gram piece of paper
B a 2-gram eraser
C a 3-gram steel paper clip
D a 4-gram iron nail

- Q3.** Steven kept track of weather conditions over one week. The following chart shows his data.

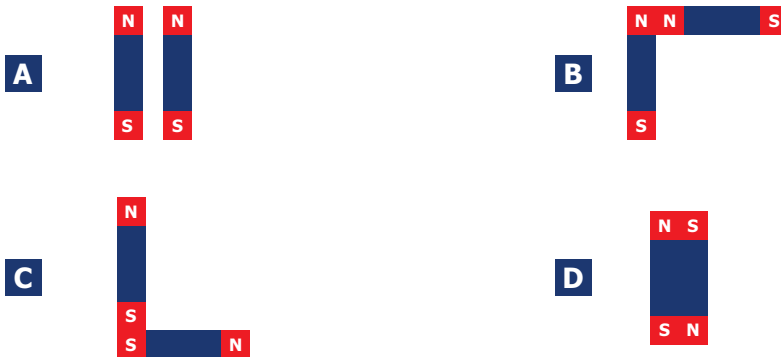
Weather Changes

Day	Temperature (degrees Fahrenheit)	Condition
Monday	56	Sunny
Tuesday	47	Cloudy
Wednesday	45	Partly cloudy
Thursday	51	Rainy
Friday	54	Partly cloudy
Saturday	68	Sunny
Sunday	61	Sunny

Which statement describes the weather during the week?

- A** It was sunny on the warmest days of the week.
B The weather improved each day of the week.
C Most days of the week were very cloudy.
D It rained on the coldest day of the week.

Q4. Which picture shows the way that two magnets will attract?



Q5. An experiment tests how many minutes students take to finish their lunches in the school cafeteria. The chart shows the average times for grades 3, 4, 5, and 6.

Grade Level	Average Time in Minutes
3	15
4	25
5	20
6	20

At which grade level do the students spend **MOST** of the 30-minute lunch period eating their lunches?

A Grade 3

B Grade 4

C Grade 5

D Grade 6

Q6. A student looks at a leaf and writes down how it looks. The leaf was

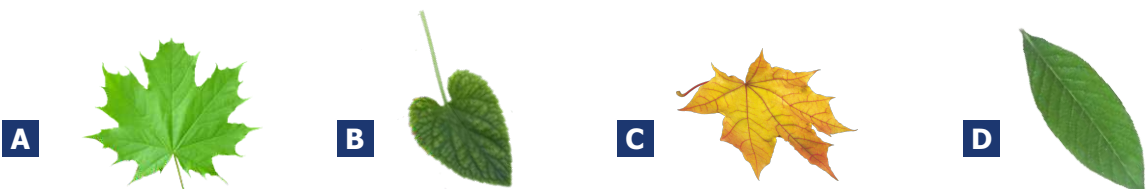
i - Long

ii - Narrow

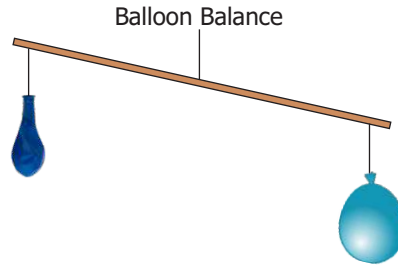
iii - Pointed End

iv - Smooth Edge

Which of these **BEST** matches the leaf the student looked at?

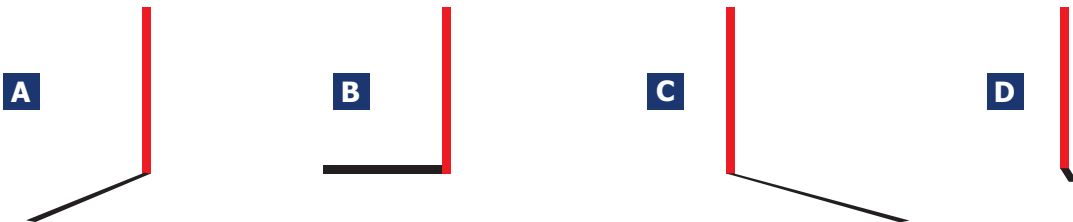


- Q7.** The picture shows a balance. One side of the balance holds an empty balloon. The other side holds the same kind of balloon full of air. Which of these is shown by the balance?



- A** Air is solid. **B** Air has heat. **C** Air has mass. **D** Air is energy.

- Q8.** Chris conducted an experiment with shadow sticks. The pictures below were drawn from his observations of the Sun's movement across the sky. Which picture shows the time of the day when the Sun was highest in the sky?



- Q9.** Which thing near this house will wash away the MOST during a heavy rain?



- A** Oven
B Dirt pile
C Stepping stones
D Soil under grass

Q10. Which kind of work is made easier by the wheels of a wagon?



- A** Pulling a heavy load
- B** Lifting a wide load
- C** Dividing a large load
- D** Holding a small load

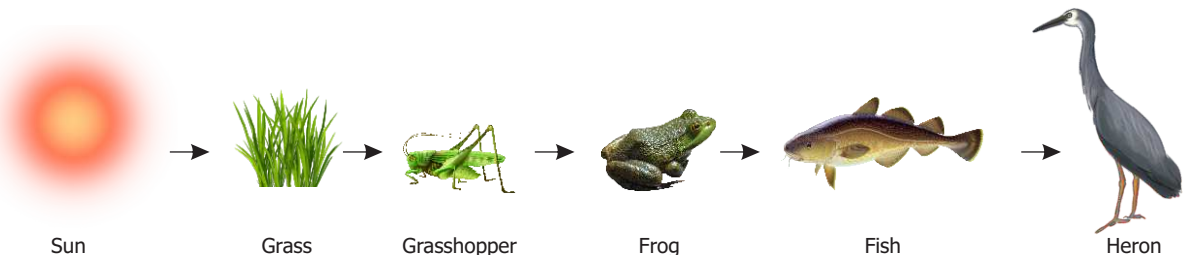
Q11. Which of these lists has only products that come from plants?

- A** Paper, spices, and fibers
- B** Wool, lumber, and butter
- C** Medicines, leather, and milk
- D** Cotton, rubber, and eggs

Q12. The BEST way to make a shadow on a living room wall is to —

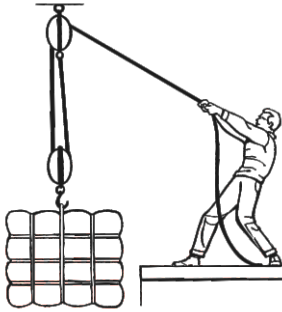
- A** hold a lamp near the floor
- B** turn off the lights in the room
- C** sit close to the wall near a window
- D** stand between a light and the wall

Q13. What most likely would happen if the frog population decreased in the area?



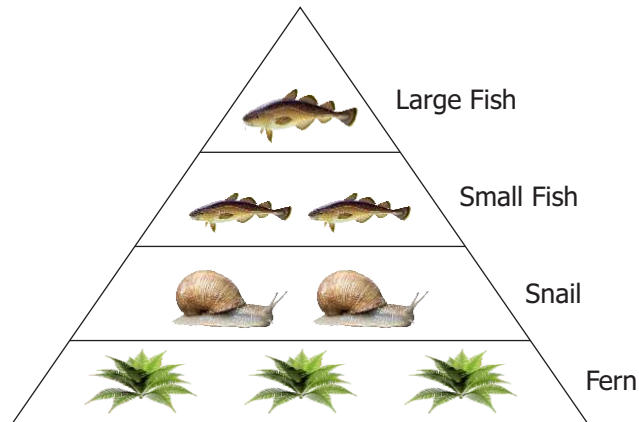
- A** The grass would grow taller.
- B** The heron would have more fish to eat.
- C** The fish population would increase.
- D** The grasshopper population would increase.

Q14. Which of these simple machines does this model represent?



- A** A screw
- B** A wedge
- C** A lever
- D** A pulley

Q15. An energy pyramid is shown below



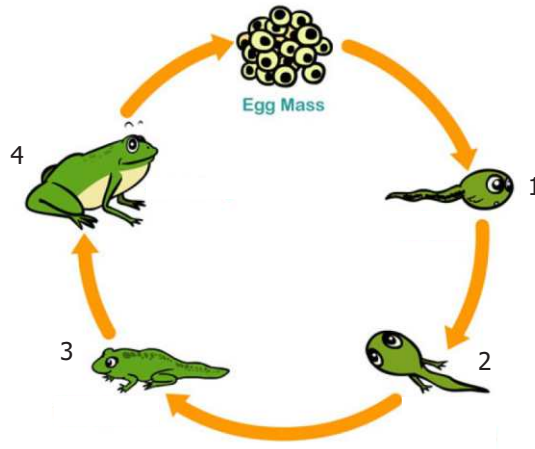
What is the role of the fern in the energy pyramid?

- A** producer
- B** herbivore
- C** carnivore
- D** decomposer

Q16. Years ago, scientists discovered that a curved piece of glass magnified the image of an object. Which new technology was created from this discovery?

- A** satellites
- B** computers
- C** telescopes
- D** radios

Q17.



In which numbered stage of the frog's life cycle does the frog begin to use lungs to breathe air?

A 1

B 2

C 3

D 4

Q18. Which part of a plant cell is not found in an animal cell?

A cell membrane

B chloroplast

C nucleus

D vacuole

Q19. Coal is an Earth material that is often used to heat people's homes. How has coal improved the quality of life for people on Earth?

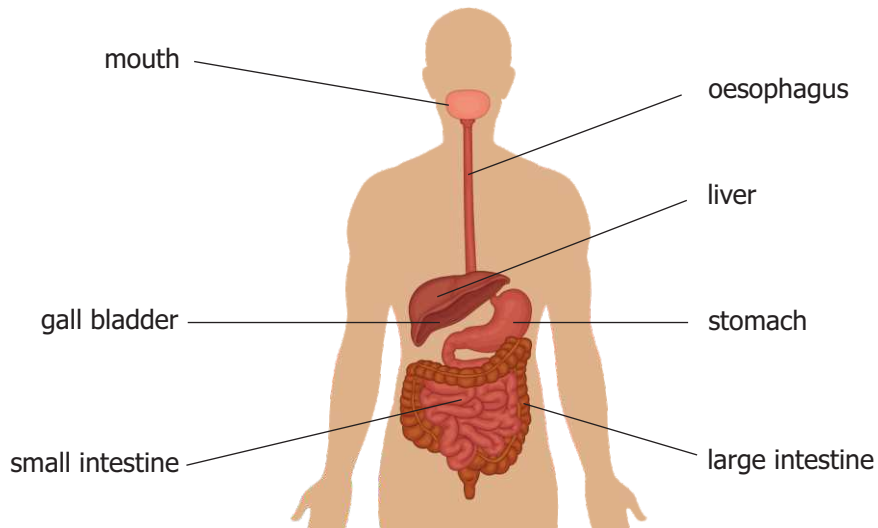
A People use coal as a fuel source.

B People use coal to build bridges.

C People use coal to power wind turbines.

D People use coal to prevent disease.

Q20. The drawing shows some parts of the human digestive system



What does food pass through on its way from the mouth to the stomach?

- A** gall bladder **B** large intestine **C** oesophagus **D** small intestine

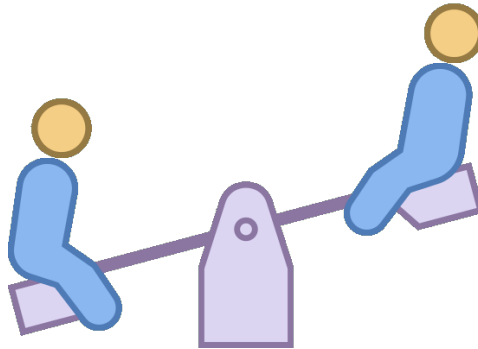
Q21. A student builds a model of a weather tool.



Which weather condition does this tool best measure?

- A** rainfall **B** air pressure **C** wind speed **D** temperature





Q22. Two students sit on opposite ends of a balanced seesaw.



What will happen if the student on the right side gets off the seesaw?

- A** The seesaw will stay balanced.
- B** The left side of the seesaw will drop to the ground.
- C** The left side of the seesaw will go up in the air.
- D** Both ends of the seesaw will drop to the ground.

Q23. A group of students wanted to see how fast snow would melt in different kinds of cups. The students put 10 grams of snow into four cups. The students then made a chart that showed how long it took the snow to melt in each cup.

Kind of Cup	Total Time for Snow to Melt (minutes)
Paper Cup 	6
Metal Cup 	5
Plastic Cup 	7
Wooden Cup 	9

Which cup was the best conductor of heat?

- A** Paper Cup
- B** Metal Cup
- C** Plastic Cup
- D** Wooden Cup

Q24. Sarah used a magnifying glass to look at the roots of a plant.



What is the main function of the roots?

A to store food

B to make food

C to take in water

D to take in soil

Q25. How is the snail's shell like the porcupine's quills?



Snail



Porcupin

A They are both used for digestion.

B They are both used for protection.

C They are both used for food gathering.

D They are both used for breathing.
