
QUESTION PAPER

ICATS SCIENCE CONTEST KIDS (GRADE 3 & 4)

TIME ALLOWED: 75 MINUTES

MAXIMUM MARKS: 75

TOTAL QUESTIONS: 25 MCQS

INSTRUCTIONS

1. DON'T OPEN THIS BOOKLET UNTIL INSTRUCTED.
2. WRITE YOUR NAME, FATHER NAME, SCHOOL ETC AT THE BUBBLE SHEET ONLY.
3. RECORD ALL ANSWERS ON THE BUBBLE SHEET ONLY.
4. 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.
6. USE OF ANY HELPING MATERIAL INCLUDING CELL PHONES AND ELECTRONIC DEVICES IS STRICTLY PROHIBITED.
7. EVERY CORRECT ANSWER EARNS THREE POINTS.
8. ONE POINT WOULD BE DEDUCTED FOR EVERY INCORRECT ANSWER.



**International
Competence and Aptitude Testing Services**

Q1. Which of these actions will conserve water?

- A. washing a car every day
 - B. watering a lawn during the day
 - C. washing small loads of clothes
 - D. watering houseplants with rainwater
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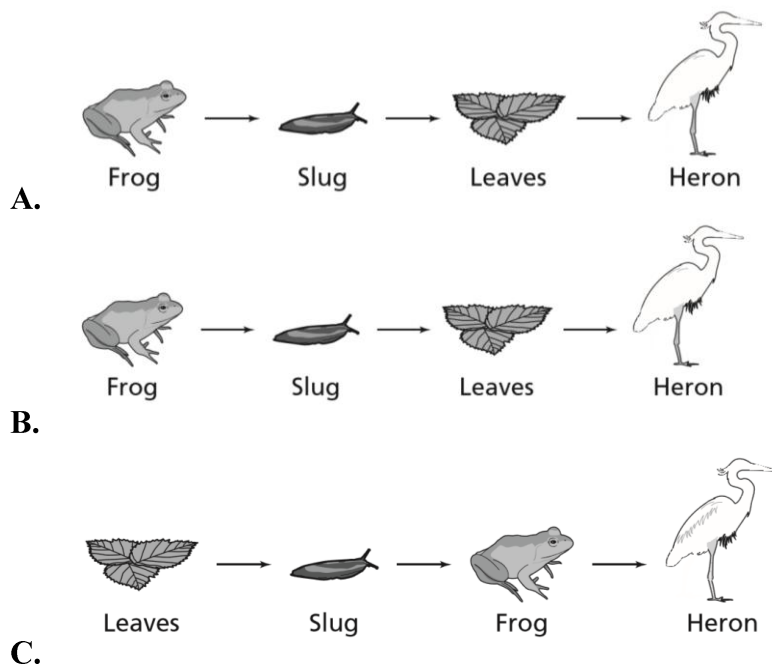
Q2. Students put some objects on two lists, as shown below.

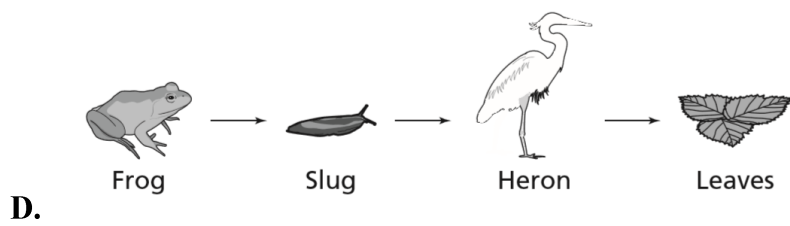
List 1	List 2
Nail Penny Paper Clip	Cork Newspaper Rubber Ball

What would be the best title for List 1?

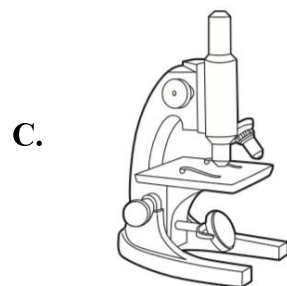
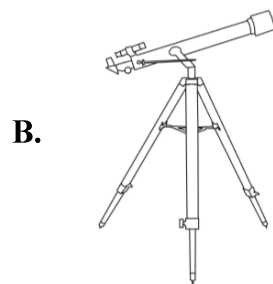
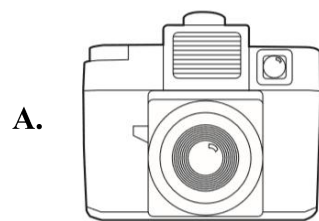
- A. Float in Water
 - B. Good Heat Conductors
 - C. Found in Nature
 - D. Bright Light Producers
-

Q3. Which food chain shows the most likely way these organisms get their food?

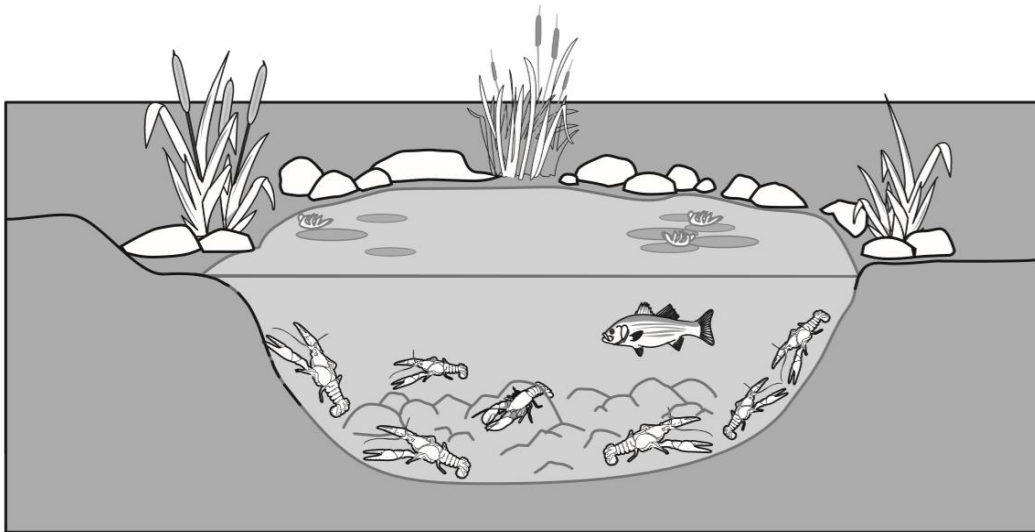




Q4. Which tool would best help a student to identify very small organisms that live in a pond?



Q5. The picture below shows a pond with many crayfish. Crayfish eat dead plants and animals.



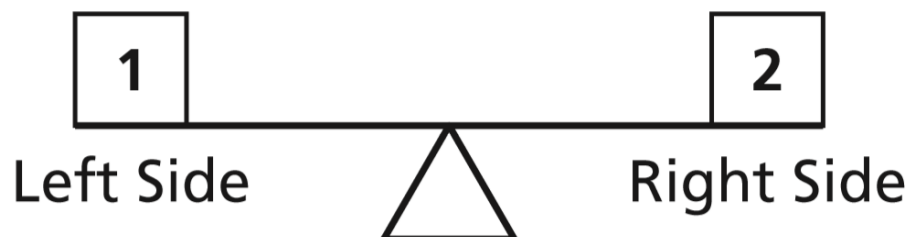
What will most likely happen to the crayfish in this pond?

- A. The crayfish will make their own food.
- B. The crayfish will compete for food.
- C. The crayfish will change color.
- D. The crayfish will grow fins.

Q6. Which feature helps plants live in a windy environment?

- A. thin seeds
- B. strong stems
- C. bright flowers
- D. large leaves

Q7. A student balances two equal weights.



The student can make the right side tilt downward by

- A. taking weight 1 off the left side.
- B. adding another weight to the left side.
- C. sliding weight 2 toward the left side.
- D. sliding both weights the same distance toward the middle.

Q8. What happens when a strong magnet comes close to a small piece of iron?

- A. The iron moves toward the magnet.
- B. The iron makes an electric spark.
- C. The iron becomes warm.
- D. The iron moves away from the magnet.

Q9. The distance four cars travelled during the same length of time is shown in the chart below.

Car Traveling Data

Car	Distance to Point 1 (km)	Distance to Point 2 (km)
J	50	50
K	100	50
L	200	25
M	75	25

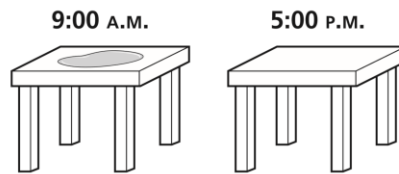
on the data in the table, which car travelled the fastest?

- A. Car J
- B. Car K
- C. Car L
- D. Car M

Q10. A student stacked three magnets on each other. Which diagram shows the three magnets attracted to each other?



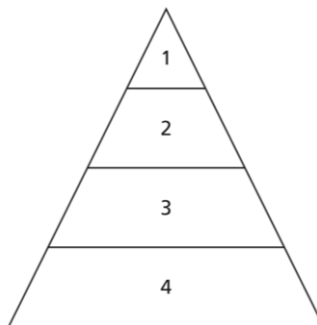
Q11. Study the drawing of a classroom investigation shown below



What most likely caused the water on the table to evaporate?

- A. heat**
- B. wind**
- C. gravity**
- D. light**

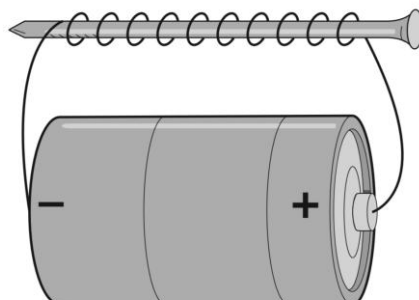
Q12. Study the following energy pyramid.



Rabbits are animals that eat plants. Where in the energy pyramid would a rabbit belong?

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

Q13. Students made an electromagnet by wrapping a wire around an iron nail and attaching the wire to a battery as shown below.



Which object will be attracted to the electromagnet?

- A. metal bar
 - B. plastic fork
 - C. ceramic mug
 - D. wooden ruler
-

Q14. Polar bears are found where it is very cold. The thick fur of a polar bear most likely helps it survive by

- A. keeping it warm.
 - B. helping it find food.
 - C. taking in extra oxygen.
 - D. protecting it from predators.
-

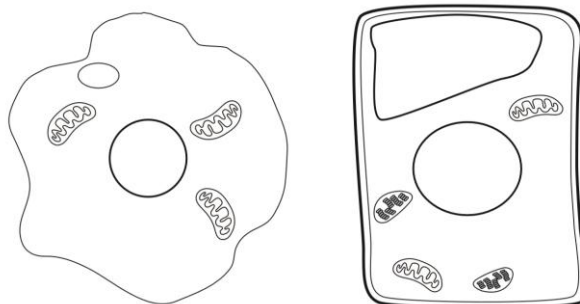
Q15. Ovens are designed to cook and bake food.



What type of energy is used to cook food in an oven?

- A. heat
 - B. solar
 - C. nuclear
 - D. mechanical
-

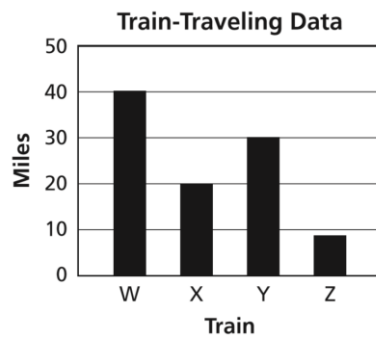
Q16. A diagram of a plant and animal cell is shown below



Which part of a cell is found in plant cells but not in animal cells?

- A. cell membrane
 - B. cell wall
 - C. nucleus
 - D. vacuole
-

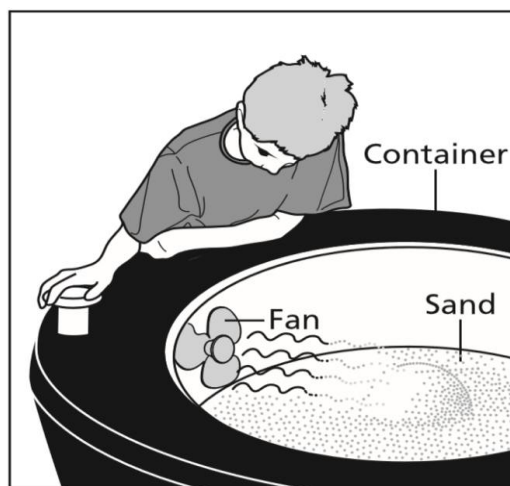
Q17. The graph shows the distance that four different trains travelled.



If each train travelled for four hours, which train travelled at the fastest speed?

- A. Train W
 - B. Train X
 - C. Train Y
 - D. Train Z
-

Q18. The following model was set up at a local science museum.



What type of erosion is the student most likely observing with this model?

- A. wind erosion
 - B. water erosion
 - C. soil erosion
 - D. rock erosion
-

Q19. A load is easier to move using the machine below



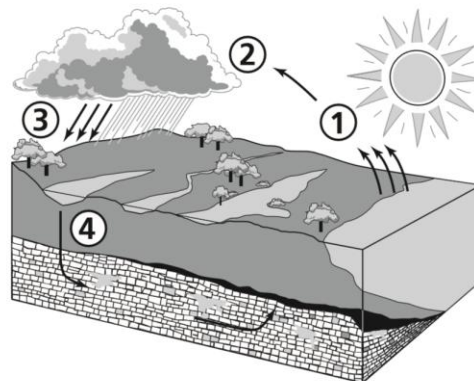
Which of these was reduced by using the wheelbarrow to move the soil?

- A. friction
- B. gravity
- C. air pressure
- D. air resistance

Q20. Aluminium is an Earth material that is strong and lightweight. How has aluminium most likely been used to improve transportation?

- A. building railroad tracks
- B. fuelling automobiles
- C. paving roads
- D. making airplanes

Q21. A diagram of the water cycle is shown.



Which process occurs at number 3?

- A. condensation
 - B. precipitation
 - C. evaporation
 - D. runoff
-

Q22. Diorite is a type of rock. When melted rock cools below the earth's surface, it can form diorite. Diorite is commonly found beneath volcanoes along the Pacific Ocean. The rock is made of large mineral grains.



What type of rock is diorite?

- A. sedimentary
 - B. metamorphic
 - C. igneous
 - D. None of these
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Q23. What is the main function of the chromosomes in a plant cell?

- A. to contain the information that the cell uses for growth and activities
 - B. to store water in the cell
 - C. to give the cell its fixed shape
 - D. to store sugar and other nutrients in the cell
-

Q24. Hawks can fly high above the ground. They use their sharp vision to search for prey. When a hawk sees a squirrel, it can dive to try to catch the squirrel.



If the nerves in a hawk's wings could not carry electrical signals, the hawk would not be able to hunt for prey. Why?

- A. The hawk's wing muscles would not be attached to its bones.
 - B. The hawk's eyes would not be able to send information to its brain.
 - C. The hawk's brain would not be able to send information to its wing muscles.
 - D. None of these
-

Q25. Which is the best method to separate iron filings mixed with sand?

- A. wash the mixture with water
 - B. stir the mixture with a spoon
 - C. pull a magnet through the mixture
 - D. pour the mixture into separate cups
-



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