

Ecolier Level (Class 3 & 4)

Time Allowed: 90 minutes

# **ALL QUESTIONS WORTH 4 POINTS**

1. Neil Armstrong is the first man who landed on the Moon. He realized that he felt lighter on the Moon than when he was on Earth, and was able to jump higher. Which force is he experiencing less of on the Moon than on Earth?



- A) Elastic spring force
- C) Frictional force

- B) Magnetic force
- D) Gravitational force
- 2. Jack traded his cow for some beans at the market. He wants to grow his beans into a beanstalk. Which of these are not needed for his beans to grow into seedlings?



- A) Water
- B) Warmth
- C) Fertilizer
- D) Oxygen
- 3. Mario was having fun exploring his new world. While he was running around, he met organism G. Organism G reproduces by spores. It does not make its own food. It breaks down dead and decaying organisms. Which kingdom of living things does organism G belong to?



- B) Plant
- C) Fungi
- D) Animal





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- 4. On your holiday to America, you visit the Statue of Liberty. You notice that the shadow of the statue changes at different times of the day. At what time will the length of the shadow be the shortest?
  - **A)** 12 pm
  - **B)** 6 am
  - **C)** 10 am
  - **D)** 5 pm



5. Indiana Jones was on an adventure when he spotted an animal he had never seen before. He asked the nearby villagers what it was, and they said that it belonged to the same group of animals as the animals shown below.







What animal could he have seen?





B)



C)



D)



- 6. Katara, Avatar Aang's friend, is a waterbender. She is able to turn water into ice. How does water turn into ice?
  - A) Water gains heat from the warmer surroundings.
  - B) Water loses heat to the colder surroundings.
  - c) Water loses heat to the warmer surroundings.
  - D) Water gains heat from the colder surroundings.





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- 7. Snoopy was playing in his backyard when he suddenly spotted some insects. He looked at it closely and realized they were butterflies! Some of the butterflies laid eggs on the leaves of plants. After a few days, the eggs hatched. Which statement correctly describes the creatures that hatch from the eggs?
  - BUTTERFLIES LIKE ME!

- A) They have wings and can fly.
- **B)** They are covered with a cocoon.
- C) They can eat and move around.
- D) They become smaller after a few days.
- 8. Bob's science teacher has these three objects.



He put these objects on the table. Then, he pushed all 3 objects off the table at the same time. When will these objects hit the ground?

- A) B will hit the ground first, followed by C, then A.
- B) C will hit the ground first, followed by B, then A.
- C) C will hit the ground first, followed by B, then A.
- **D)** A will hit the ground first, followed by C, then B.
- **9.** Albert recently learned about living and non-living things. His teacher told him that some non-living things can be made from living things. Which of the following objects was once a living thing?



B)



C)



D)

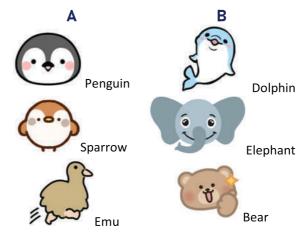




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10. Bob went to the zoo with his Science teacher. At the zoo, he sent his mother messages to tell her about the animals that he saw. He used different emojis (pictures) to represent each animal. He grouped the emojis into two groups, shown below:

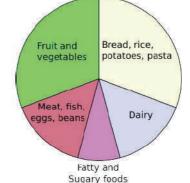


#### What are groups A and B?

- A) A: Mammals, B: Reptiles
- C) A: Land animals. B: Water animals
- B) A: Birds, B: Mammals
- **D)** A: Birds. B: Amphibians
- 11. Some materials, like glass, can be scratched easily, while diamonds cannot be scratched by anything at all. John used a nail to scratch different materials. What property of these materials is he trying to test?



- A) The conductivity of the material
- B) The density of the material
- C) The hardness of the material
- **D)** The flexibility of the material
- 12. Bob is very fat. His Science teacher showed him a food wheel. This food wheel shows different types of food that Bob can eat. Bob must eat a healthy diet to lose weight. He should eat less unhealthy food. On the food wheel, unhealthy food is shown as a small slice.



Which food should Bob eat as little as possible?

B)





Grilled steak





muffin

# stemco

## INTERNATIONAL KANGAROO SCIENCE CONTEST 2024

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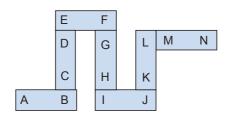
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13. An ecosystem includes living organisms, and the habitat they live in. Organisms live in harmony with their environment. Every ecosystem consists of living things, as well as non-living things. Sheldon was having a walk in the park. He saw many living and non-living things. Which option correctly classifies them into living and non-living things.



- A) Living thing Rock; Non-living thing Dog
- **B)** Living thing Bird; Non-living thing Tree
- **C)** Living thing Sunlight; Non-living thing Soil
- D) Living thing Grass; Non-living thing Sun

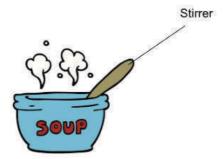
14. Dylan's teacher placed the magnets in the following manner.



Dylan took some of the magnets to play. Which two poles will repel each other?

- A) Hand L
- B) D and G
- C) I and L
- D) A and N

15. Annie's mother is preparing soup for dinner; however, she could not find the soup stirrer. She asked Annie to go to the supermarket to buy one.



Annie knows that her mother must stir the hot soup for a very long time. Which properties should the soup stirrer have?

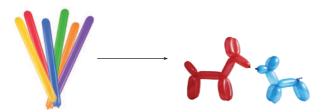
- A) High melting point, poor conductor of heat
- B) High melting point, good conductor of heat
- C) Low melting point, good conductor of heat
- D) Low melting point, poor conductor of heat



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16. Ali is a balloon artist who transforms long rubber balloons into various shapes and designs, as depicted in the picture below. What property of the balloon enables him to do so?



- A) Flexibility
- B) Waterproofness C) Strength
- D) Hardness
- 17. Kate was learning about the human digestive system in class.



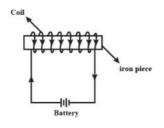
Which organ mainly absorbs nutrients from digested food?

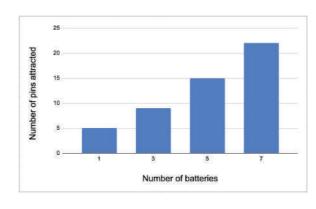
- A) Stomach
- B) Mouth
- C) Large intestine
- D) Small intestine
- 18. Samantha is conducting an experiment to observe the changes in water when heated. She notices that at a certain temperature, the water starts to bubble and turn into steam. At what temperature does water start to boil and change into steam?



- **A)** 50°C
- **B)** 10°C
- **C)** 500°C
- **D)** 100°C

19. Sonia tested an electromagnet by using different numbers of batteries. According to the graph, how many pins would the electromagnet attract if there were 4 batteries used?





**A)** 19

- **B)** 7
- **C)** 13
- **D)** 25

20. Liquids are a state of matter. They do not have a fixed shape.



Which of these is not a liquid?





B)



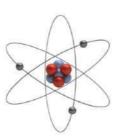
C)



D)



21. The diagram here shows a simplified version of what?



- A) The Solar System
- C) Galaxy formation

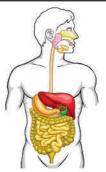
- B) An atom
- D) A glucose molecule



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- **22.** The image here is a partial diagram of what system in the human body?
  - A) Immune
  - B) Digestive
  - C) Respiratory
  - **D)** Circulatory



23. Which type of renewable energy is generated by the structure shown here?



- A) Hydroelectric
- B) Geothermal
- C) Wind
- D) Solar

24. The plant shown here, native to the Carolinas, is famous for its ability to do what?



- A) Trap and eat insects
- B) Cause an itchy rash if touched by human skin
- C) Produce tasty citrus fruit
- D) Survive without water for over a year