



OUT OF THIS WORLD

Squishy Fishy Robot Explorers

Water is an essential ingredient of all forms of life as we know it. Is it possible that there is life in the icy ocean that covers Jupiter's moon Europa? Read *Squishy Fishy Robot Explorers* to learn more!

What did you learn?

QUESTIONS

1. Jupiter is a ...
 - a. Moon
 - b. Star
 - c. Gas giant
 - d. Dwarf planet
2. Magnets can create ...
 - a. Energy
 - b. Ripples
 - c. Repulsions
 - d. Magnetic fields
3. Arthur C. Clarke's stories were known for ...
 - a. Scientific accuracy
 - b. Not including aliens
 - c. Historical accuracy
 - d. Never being set on Earth
4. The root of *bio* means ...
 - a. Boat
 - b. Life
 - c. Biology
 - d. Death
5. What does NIAC stand for?
6. Who is this?



TRUE OR FALSE?

- | | |
|--|---|
| _____ 1. Europa's surface is mostly made of blocks of ice that have cracked and shifted. | _____ 4. Soft robots can also be used in the medical field. |
| _____ 2. Scientists who search for signs of alien life are called astrobiologists. | _____ 5. The squishy robots would produce small scale explosions. |
| _____ 3. Traditional robots are made of wire. | _____ 6. Bacteria could be a sign of life on Europa. |

ANSWERS

- 1. c. Gas giant.** According to section "Destination: Europa" on page 9, we know that "Jupiter is the largest planet in the solar system. It is a gas giant." So, the correct answer is C.
- 2. d. Magnetic fields.** According to section "Powering the mission" on page 14, we know that "Magnets and other magnetic objects cause an invisible area of influence, or effect, around them called a magnetic field." So, the correct answer is D.
- 3. a. Scientific accuracy.** According to section "Inventor feature: Inspired by science fiction" on page 24, we know that "Arthur C. Clarke (1917–2008) was a British-born author whose science fiction stories are known for their scientific accuracy." So, the correct answer is A.
- 4. b. Life.** According to section "Big idea: Bioinspired" on page 28, we know that "The root of *bio* (BY oh) means *life* and is taken from an ancient Greek word." So, the correct answer is B.
- 5.** According to page 7, NIAC stands for NASA Innovative Advanced Concepts.
- 6.** As can be seen on page 7, the illustration shows Mason Peck.

TRUE OR FALSE? ANSWERS

- 1. True.** According to section "Destination: Europa" on page 8, we know that "Europa's surface is mostly made up of huge blocks of ice that have cracked and shifted about." So, the correct answer is True.
- 2. True.** According to section "Destination: Europa" on page 11, we know that "Astrobiologists are scientists who search for signs of alien life." So, the correct answer is True.
- 3. False.** According to section "A softer robot" on page 18, we know that "Traditional robots have bodies made of hard metal or plastic." So, the correct answer is False.
- 4. True.** According to section "A softer robot" on page 21, we know that "Soft robotics is also being developed for use in the medical field." So, the correct answer is True.
- 5. True.** According to section "Swim like a fish?" on page 26, we know that "The fishy, squishy robot would produce such explosions on a much smaller scale." So, the correct answer is True.
- 6. False.** According to section "Looking for life" on page 38, we know that "Living things make and use a variety of proteins." So, the correct answer is False.