

A Million Whys Book 15: Science Quiz

The Robot Expedition, by Crafty Clover.

Name: _____ Date: _____ Score: _____ / 10

The questions

- A.** Why Do We Call a Machine a Robot?
- B.** Why Does a Robot's Weight Matter So Much to Designers?
- C.** What Is a Sensor, and Why Do Robots Need Them?
- D.** How Does a Robot Hand Know How Hard to Squeeze?
- E.** How Does a Robot Gripper Pick Up Things?
- F.** Why Do Robot Vacuums Get Stuck on Socks and Cords?
- G.** Why Do Delivery Robots Roll Along Sidewalks?
- H.** Why Do Two of a Drone's Propellers Spin One Way and Two the Other?
- I.** Why Do We Send Rovers to the Moon?
- J.** Why Do Some Robots Remember Where They Have Been?

Write the letter of the matching question next to each fact.

1. Sensors are like a robot's eyes, ears, and skin. _____
2. Remembering helps save time and battery. _____
3. Learning to work on the Moon helps us prepare for farther places. _____
4. Grip depends on both squeezing and friction. _____
5. The pushes cancel like a tug of war that ends in a tie. _____
6. Many sidewalk delivery robots travel at about a walking pace, around 4 miles per hour (6 km/h). _____
7. Newer vacuums have cameras that try to recognize cords and socks. _____
8. Perseverance weighs about 2,260 pounds (1,025 kg), and a rocket had to carry every pound to Mars. _____
9. People first imagined robots long before anyone could build them. _____
10. Gentle squeezing needs feedback, not just strength. _____

Watch a short video answer for every question at xdme.com

Answer key

1. **C** (Sensors are like a robot's eyes, ears, and skin. Book 15, Question 26)
2. **J** (Remembering helps save time and battery. Book 15, Question 136)
3. **I** (Learning to work on the Moon helps us prepare for farther places. Book 15, Question 120)
4. **E** (Grip depends on both squeezing and friction. Book 15, Question 63)
5. **H** (The pushes cancel like a tug of war that ends in a tie. Book 15, Question 103)
6. **G** (Many sidewalk delivery robots travel at about a walking pace, around 4 miles per hour (6 km/h). Book 15, Question 89)
7. **F** (Newer vacuums have cameras that try to recognize cords and socks. Book 15, Question 77)
8. **B** (Perseverance weighs about 2,260 pounds (1,025 kg), and a rocket had to carry every pound to Mars. Book 15, Question 13)
9. **A** (People first imagined robots long before anyone could build them. Book 15, Question 1)
10. **D** (Gentle squeezing needs feedback, not just strength. Book 15, Question 46)