

Robotics Essentials for Teens

Robotics · Answer Key · 10 Questions

1. Which component of a robot acts similarly to a human brain by processing information?

- A) Actuator
- B) Microcontroller**
- C) Sensor
- D) Chassis

2. What is the term for a machine that can perform tasks automatically without human intervention?

- A) Analog tool
- B) Robot**
- C) Engine
- D) Lever

3. Which part of a robot is responsible for detecting changes in the environment, such as light or distance?

- A) Sensor**
- B) Battery
- C) Gearbox
- D) Software

4. What type of robotic component is responsible for producing physical movement?

- A) Processor
- B) Memory
- C) Actuator**
- D) Transistor

5. Who is credited with coining the term 'robotics' in his science fiction writing?

- A) Nikola Tesla
- B) Isaac Asimov**
- C) Alan Turing
- D) Steve Jobs

6. Which of these power sources is most commonly used to provide energy to mobile robots?

- A) Nuclear fusion
- B) Coal combustion
- C) Lithium-ion battery**
- D) Steam engine

7. What do we call the set of instructions written by a programmer that tells a robot what to do?

- A) Circuitry
- B) Algorithm**
- C) Voltage
- D) Hardware

8. In robotics, what is a 'degree of freedom' usually referring to?

- A) The price of the robot
- B) The number of independent movements**
- C) The internet speed
- D) The weight of the robot

9. Which of these is a common programming language used to control robotic systems?

- A) Python**
- B) HTML
- C) CSS
- D) Markdown

10. What is the name of a robotic arm that is frequently used in automotive manufacturing to weld or paint parts?

- A) Industrial robotic arm**
- B) Drone
- C) Humanoid robot
- D) Microbot