

name: _____

class: _____

date: _____

Hardware and Robotics



Hardware and Robotics are crucial components of modern _____ science.

They involve the physical elements of computers, like circuits, chips, and screens. Robots, on the other hand, are often designed to perform tasks that are dangerous or difficult for humans. The _____ of a robot is its computer, which follows programmed instructions. Hardware in robotics includes motors, sensors, and sometimes even advanced tools like _____. These elements work together to allow robots to move, sense, and interact with their environment.

Programming is essential in robotics. It's like teaching a robot how to _____ and react. This process can be complex, involving coding languages like Python or C++. Students interested in robotics often start by learning these _____. They also need to understand the principles of electronics and mechanics. For example, learning about _____ and how it powers motors can be fascinating.

Safety is a key concern in robotics. Engineers must design robots to be safe around _____. This includes making sure that they can't cause harm even if they malfunction. Some robots are even designed to work alongside humans, known as _____ robots or cobots.

The future of hardware and robotics is exciting. We might see robots that are more _____, capable of learning from their experiences. They could become essential in industries like healthcare, where they can assist in surgeries or care for the _____. In education, robotics can help students learn about science, technology, engineering, and _____ in a fun and engaging way. The possibilities are endless, making this field an exciting area for young learners to explore.

humans intelligent lasers brain computer mathematics electricity
collaborative think elderly languages