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Robots and their Types



LEARNING OUTCOMES

At the end of the chapter, students will be able to:

- ▶ Define and tell what robots are
- ▶ Illustrate how robots have evolved over time
- ▶ Classify different types of robots
- ▶ Outline what robotics can teach

CHAPTER NOTES

- ▶ The word robot is derived from the Czech word robota, which means “forced labour.”
- ▶ A robot is a type of automated machine that can execute specific tasks with little or no human intervention and with speed and precision.
- ▶ Industrial robots bring into play in an industrialised manufacturing atmosphere.
- ▶ Domestic robot consists of numerous different gears like robotic pool cleaners, robotic sweepers, robotic vacuum cleaners, etc., that can perform different household tasks.
- ▶ Delivery robots can autonomously deliver packages, food, or even medicines.
- ▶ The da Vinci Surgical System is a well-known medical robot.
- ▶ Military robot consists of bomb discarding robots, various shipping robots.
- ▶ Robotic Pets that mimic the behaviour of real pets, like Sony's Aibo robot dog.
- ▶ Curiosity Rover explored the surface of Mars.
- ▶ Agricultural robots help with tasks in farming and agriculture.
- ▶ LEGO Mindstorms is a popular kit that lets kids build and program their own robots.
- ▶ Social robots are designed to interact and communicate with humans in a social way.
- ▶ Robotics can teach skills like Problem solving, teamwork, patience and persistence.