

Unit 1, Topic 4 – Robotics

A robot is a machine made to act like a living thing. Robotics is the study of robots. Robotics is a control system technology. Through input data and a variety of other processes, people have learned to control the output of machines. Today, robots are designed to do many of the tasks humans used to do.

1. Navigate to Google Classroom, Control 8 (Unit 1, Topic 1 to 7). Create a new Docs. Rename it: "Unit 1, Topic 4 - Robotics". Don't forget the heading (same as the top of this page) and your name in italics under that heading.
2. In a paragraph, define the words '*robot*' and '*robotics*'. Find a picture of a real robot on the internet and post it in this paragraph too. [5 marks]
3. In a second paragraph, point out the basic components of your robot in a bulleted list. You should include robotic arms, robotic hands (also known as end effectors), the work envelope and any hydraulic or pneumatic components. (See page 331 of "***Technology Interactions***" – ask your teacher for this text) [4 marks]
4. In a third paragraph, describe how robots use pneumatic and hydraulic systems. (See page 333 of "***Technology Interactions***" – ask your teacher for this text) [2 marks]
5. In a fourth paragraph, list FOUR(4) uses of robots. [4 marks]

TOTAL: 15 MARKS