

6. Automated and emerging technologies

6.2 Robotics

1 A company uses robots in its factory to manufacture large pieces of furniture.

(a) One characteristic of a robot is that it is programmable.

State **two** other characteristics of a robot.

1

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2

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[2]

(b) Give **two** advantages to company employees of using robots to manufacture large pieces of furniture.

1

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2

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[2]

(c) Give **one** disadvantage to the company's owners of using robots to manufacture large pieces of furniture.

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..... [1]

2 A farmer uses an automated robot to plant seeds in the field.

(a) State what is meant by the robot being automated.

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..... [1]

(b) Give **three** characteristics of a robot.

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2
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3
..... [3]

(d) Give **two** advantages of the farmer using an automated robot to plant seeds.

1

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2

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[2]

(e) Give **two** disadvantages of the farmer using an automated robot to plant seeds.

1

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2

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[2]

(f) The robot is adapted to have machine learning capabilities.

Explain how this will improve the robot.

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..... [2]