

# Robot Jobs

## FOCUS QUESTIONS

1. Explain the *Robot Jobs* story to another student.
2. What is artificial intelligence?
3. Give examples of jobs that artificial intelligence is already doing.
4. How are robots being used in the legal profession?
5. What sorts of jobs could be replaced by artificial intelligence?
6. What is an advantage of robots doing some jobs?
7. According to experts, it's important for kids to learn \_\_\_\_\_ subjects.
8. A recent report said that by 2030, workers will spend 77% more time using...
9. What was surprising about this story?
10. Do you think artificial intelligence will make the world better? Give reasons for your answer.

## ACTIVITY

### Class Discussion

Watch the BTN *Robot Jobs* story and discuss as a class. What questions were raised in the discussion (what are the gaps in their knowledge)? The following questions may help guide the discussion:

- What is artificial intelligence?
- What are some examples of artificial intelligence?
- Which jobs may be done by robots in the future?

The following KWLH organiser provides students with a framework to explore their knowledge on this topic and consider what they would like to know and learn.

<i>What do I know?</i>	<i>What do I want to know?</i>	<i>What have I learnt?</i>	<i>How will I find out?</i>



## KEY LEARNING

Students will develop a deeper understanding of what artificial intelligence is and how it will impact on society.



## AUSTRALIAN CURRICULUM

### Design and Technologies – Years 5 & 6

Select appropriate materials, components, tools, equipment and techniques and apply safe procedures to make designed solutions

### Design and Technologies – Years 7 & 8

Select and justify choices of materials, components, tools, equipment and techniques to effectively and safely make designed solutions

### Science – Year 4

Science knowledge helps people to understand the effect of their actions

### Science – Years 5 & 6

Scientific knowledge is used to solve problems and inform personal and community decisions



## ACTIVITY

Students will investigate in more depth some questions they have about artificial intelligence.

**Define:** What do I want to know?

### Key questions to research

Students can choose one or more of the following questions or come up with their own:

- What is artificial intelligence and how is it currently being used?
- How will artificial intelligence change society? Make some predictions.
- What is the history of artificial intelligence? When did the idea of artificial intelligence begin?
- How can we prepare for artificial intelligence?

### Locate: Where do I find the information?

What resources will help answer my questions? (Internet, people, resource centre, organisations, print). Discuss with students what a reliable source is.

### Select: What information is important for the investigation?

Students may need support to sort through and select relevant information.

### Organise: How do I make sense of the information?

Students can organise their research by creating main headings from their questions. Write each heading on a separate piece of paper. Record the information found for each question.

### Present: How do we let others know about this information?

Students decide on the best way to present the information. Possibilities could include:

- A 'Did You Know' Fact sheet
- Create an infographic using [Canva](#)
- [Prezi](#) presentation
- Oral presentation
- Glogster

### Evaluate: What have we learnt?

Students reflect on what they have learnt about artificial intelligence and respond to the following.

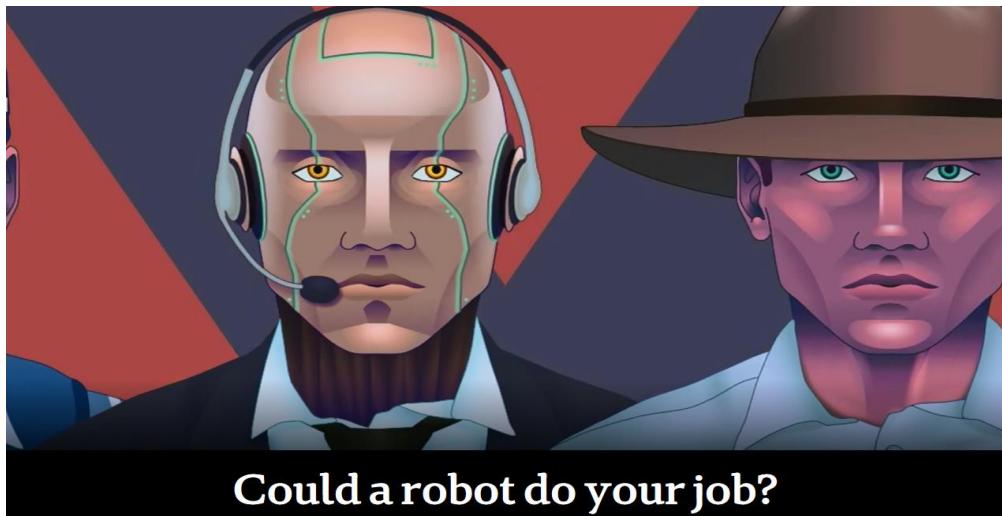
- What I learned...
- What I found surprising...

## ACTIVITY

### Could a robot do your job?

Look at the ABC interactive [Could a robot do your job?](#) then respond to the following:

- Choose five jobs to search for and record what percentage is more likely to be automated. Record some of the tasks that could be automated. Which tasks will still need to be done by humans?
- Which jobs face the biggest risk of automation? Who faces the lowest risk of automation?
- What was the most surprising thing you learnt?



## ACTIVITY

Watch BTN's [Artificial Intelligence Jobs](#) story and then respond to the following questions:

1. What is artificial intelligence?
2. Give examples of how artificial intelligence is being used.
3. Scientists predict that in the next decade \_\_\_\_\_ % of Australian jobs could be replaced by artificial intelligence.
4. What sorts of jobs could be replaced by computers and robots?
5. A student from the UK has developed software that can...
6. What are STEM subjects and why is it important to learn them at school?
7. about this story?
8. Name three facts you learnt watching the BtN story.



## ACTIVITY

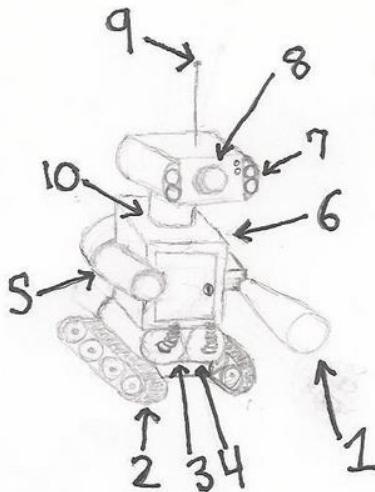
### Design a Robot

If you could build a robot what kind of robot would you build? What would you make it do? Would it make your breakfast or clean your bedroom? Brainstorm ideas in pairs and then share your ideas as a class.

Students will design a robot that performs a specific task. When thinking about their design, ask them to consider:

- What problem or challenge does the robot solve?
- What are some of the functions your program will carry out?
- Is it a function that a human could perform?
- Does the robot need any special features? If so, what are they?
- What will your robot look like?
- How will your robot function? Consider the following:
  - How will it be controlled?
  - How does it move?
  - How will it detect the environment around it?
  - How will it be powered? (energy source)

Draw a design of your robot and present it to the class. Include a detailed diagram of each component and a description of how it works



If students have access to robot making products, they can design and build a robot that performs a specific task. How are the instructions for the robot written so that it will perform the task?

## ACTIVITY

### Ask a Reporter

Ask Jack your questions about *Robot Jobs* on BTNs *Ask a Reporter*, at 2:15pm (AEST) Friday 18th August 2017. Ask A Reporter provides students a chance to ask BTN reporters' questions. Each Friday BTN live streams a 20-30minute Q&A session.

Watch a previous *Ask a Reporter* session with Robot Jack and Amelia about artificial intelligence. Students from around Australia sent in their questions for Jack to answer. See his responses [here](#)





## USEFUL WEBSITES

BTN - Artificial Intelligence Jobs

[http://www.abc.net.au\(btn/story/s4576643.htm](http://www.abc.net.au(btn/story/s4576643.htm)

BTN – Future Careers

[http://www.abc.net.au\(btn/story/s4126201.htm](http://www.abc.net.au(btn/story/s4126201.htm)

ABC News – Could a robot do your job?

<http://www.abc.net.au/news/2017-08-08/could-a-robot-do-your-job-artificial-intelligence/8782174>

ABC News – Lawyers, accountants join list of workers who could lose their jobs to AI, warns report

<http://www.abc.net.au/news/2017-04-05/artificial-intelligence-taking-lawyer-accountant-analyst-jobs/8415286>