

TEACHERS' NOTES



ROBOTS

THE FUTURE IS NOW

CHARLES HOPE



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Synopsis

Robots. They are all around us. They vacuum our floors, process our food, make our cars. But what is a robot? How do they work? **Robots: The future is now.**

Writing style

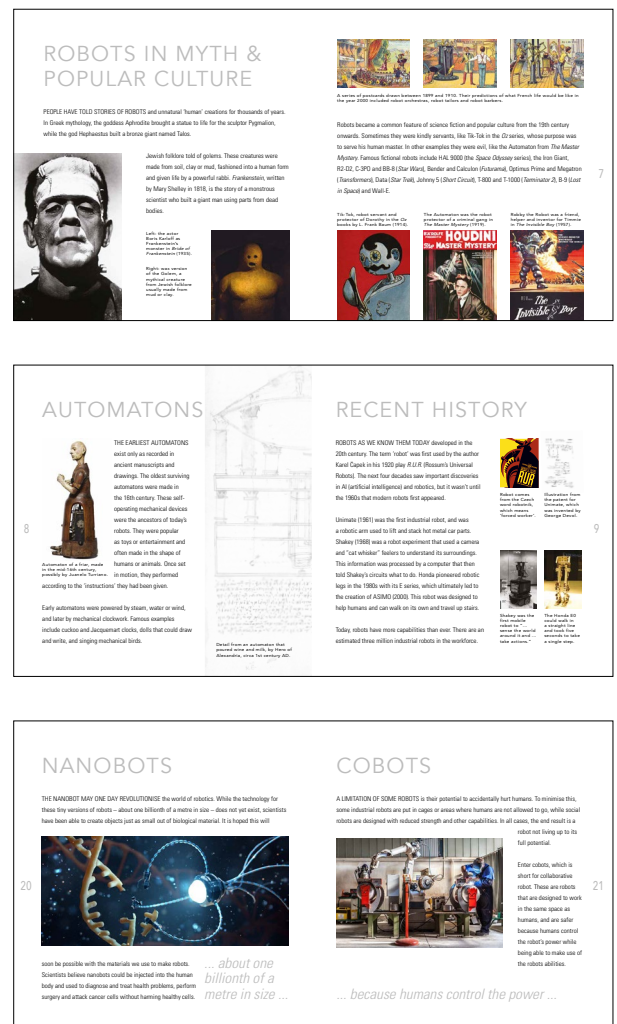
Robots: The Future is Now has been designed with the needs of early and moderate readers in mind. The amount of text on each page is kept to a minimum, and in some cases combines primary text with smaller-sized captions or enlarged pull quotes for enhanced engagement. Given the subject matter, special care is taken to reduce complex concepts to their bare essence. The information conveyed by the text has a natural and understandable flow, and the variously-sized images relate directly to the text, so young readers have multiple entry points to engaging with the information.

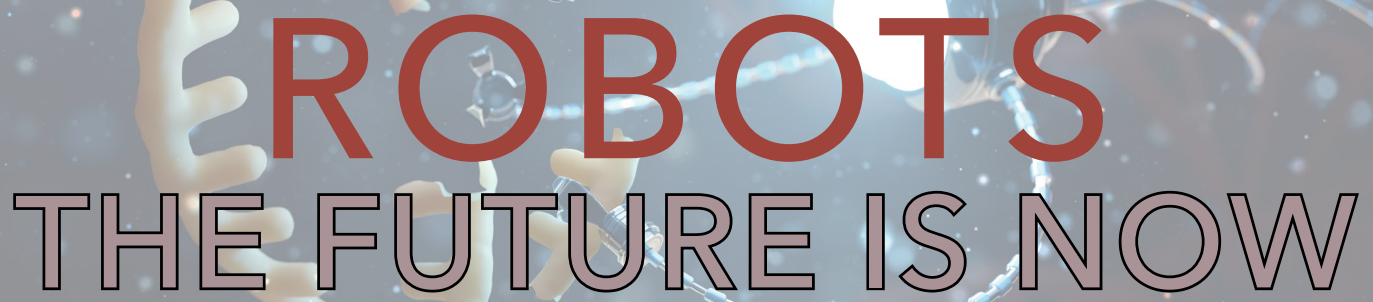
Photographic style

The Future is Now combines photographs and illustrations from a variety of sources. These include historical and pop-culture references, as well as the latest in scientific imagery. The images vary in size and are artfully set on white backdrops, allowing the text room to breathe. These images have the advantage of being static, giving the reader the opportunity to explore the image and look at the subject matter and its features in detail. The photographs are also strongly composed and clearly printed with bright strong colours to increase the appeal to visual readers. Readers can explore how images are used to convey messages.

Specifications

Author	Charles Hope	Binding	Hardback
ISBN	9781742034799	Reading level	7+
Format	260mm x 250mm	Interest level	7+
Extent	24pp + ends/cover	Category	Non-Fiction





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Study notes: Themes

- Descriptive words
- Modern technology
- General history
- Automations
- How do they work?
- How are they used?
- Robots and AI
- Robots versus cyborgs and androids
- Uncanny valley
- Why use them?
- Robots and fear
- The future of robots

Curriculum link: Literacy

Before reading:

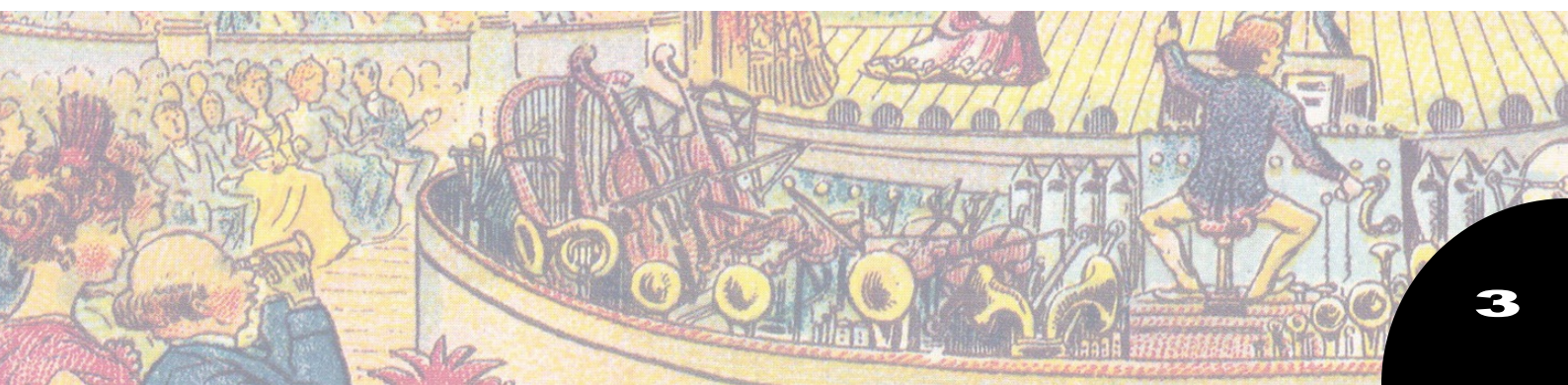
- Before looking at the cover, ask students to draw a robot.
- Brainstorm what students know about robots.
- What is their first response when they look at the cover of the book?
- Read the blurb and ask students if they can think of any other examples of how robots are being used.
- Create a list that the class comes up with of their ideas and any questions that arise. After reading the book, recheck the list.

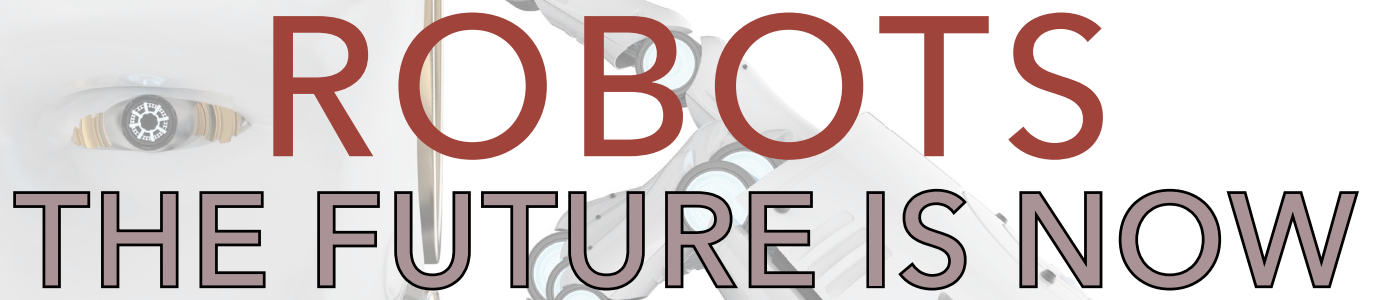
While reading:

- Before reading, give each student a few sticky notes. Ask students to note any words, questions or wonderings they hear or have that they'd like to share or ask. These can be collated and displayed on a noticeboard or poster. Their questions, lists and wonderings are an opportunity to assess current knowledge and will provide direction for discussions, investigations or presentations.
- Ask the students to take turns reading a paragraph aloud to the rest of the class. Where appropriate, ask the students what they think certain words may mean.

After reading:

- Ask the students to reflect on the words they would use to describe robots and the words that were used in the book. Ask them to draw up a list of words that can be used to describe robots.





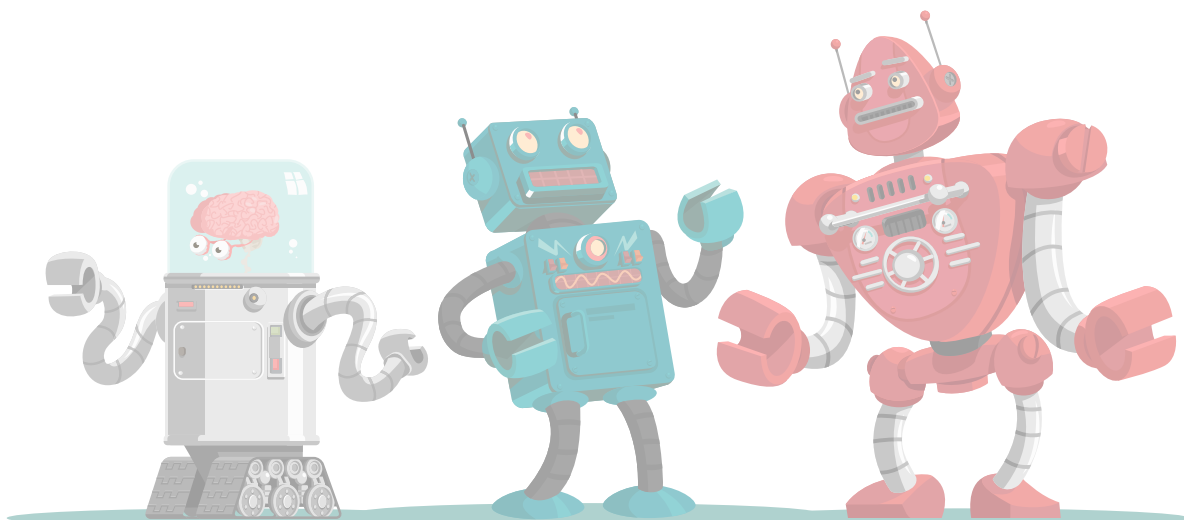
ROBOTS

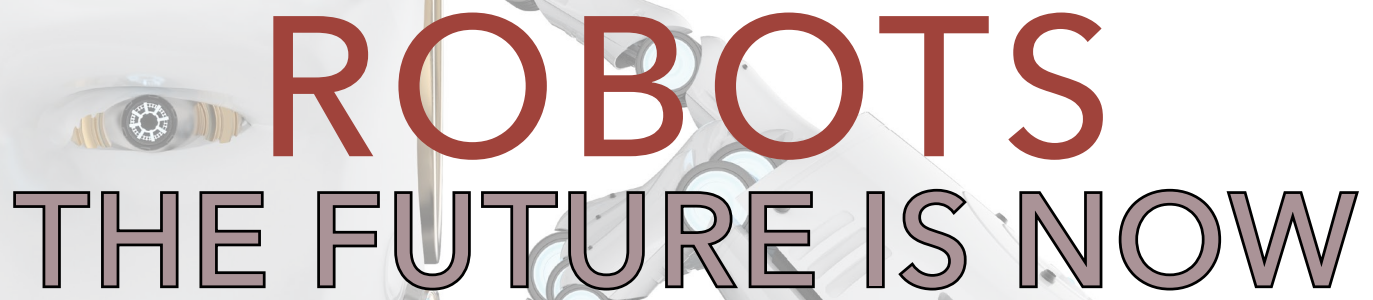
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Curriculum Theme: Critical and Creative Thinking

After reading, ask the students the following questions:

- What are robots?
- Why are they important?
- How long have they been around?
- Give an example/s of older technology that led to the discovery of robots.
- What are some examples of how robots are being used today?
- How might robots be used in the future?
- How are robots limited when compared to humans? How are they better?
- How might robots change and influence our lives?
- Will robots have a positive or negative impact on our lives?
- Would they like a robot of their own? What would they like it to do?
- Are robots likely to replace humans in the workforce?
- Will robots ever be able to think exactly like humans?
- Will there be robots in the future that look and act exactly like humans i.e. we won't be able to tell the difference between them and us?





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Curriculum link: ICT Capability

After reading:

ACTIVITY: *Nothing to fear?*

- Organise the class into groups of three or four. Assign each group a fictional robot taken from the book in the list below. (NB: please exclude those you consider age-inappropriate, and add other examples if/as required.)

B-9	Data	R2-D2
BB-8	Iron Giant	Tik-Tok
Bender	Johnny 5	Wall-E
C-3PO	Megatron	
Calculon	Optimus Prime	
- Have students research their fictional robot online and find out whether their robot was considered to be good or bad in their book, film or television show.
- People of the past were both afraid and excited about the potential of robots. Examine the images on pages 6 and 7. What clues do they provide about their fears and expectations? How close were they to guessing what robots would eventually become?

ACTIVITY: *Famous robots*

- Divide your class into groups of three or four. Allocate each group one of the real-world robots mentioned in the book.

ASIMO	Opportunity	Unimate
BUDDY	Shakey	Valkyrie
Curiosity	Sojourner	Voyager 1
E0	Sophia	Voyager 2
NAO	Spirit	

- Students are to create a mini biography. These can take on whatever form the students choose – a poster, media or digital presentation, or booklet.

Projects to include: information about the robot's life (including significant dates, achievements and discoveries), any problems they had to overcome, how the world remembers them, and their unique role in the history of robot technology.

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Curriculum Theme: ICT Capability (continued)

After reading:

ACTIVITY: Creative activities

- Ask the students to write a creative story about a future in which robots have become incredibly advanced and widespread in society. How are their lives affected? Are there more or less humans? How has technology changed? What does the world look like? Is it a good or bad place to live?
- Imagine your best friend is a robot. Write a narrative about your day-to-day experiences.
- Imagine you are an astronaut on a mission to another galaxy that will take years to complete. Your only company is a robot. Write a narrative about your experience.
- Imagine you are an inventor tasked with building a robot that will save the planet. What will it be capable of doing? What are its key features? Write a narrative about your experience, and draw a design of your robot.

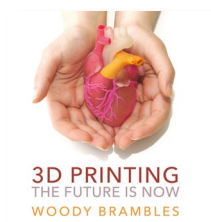
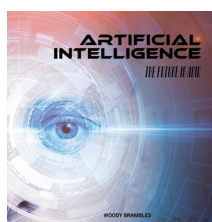
Additional video resources

- [Automaton 1](#), [Automaton 2](#), [Automaton 3](#)
- [Boston Dynamics youtube channel](#)
- [Humans being mean to robots](#)
- [Trailer for *The Iron Giant* movie](#) (rated PG)
- [Elektro the robot](#)
- [Unimate](#)
- [Shakey](#)
- [History of Honda robots](#)
- [Tesla robots](#)
- [How robots work](#)
- [Valkyrie](#)
- [Robots on Jimmy Kimmel](#)
- [Mars rover](#)
- [Uncanny Valley](#)
- [Nanobots in *Big Hero 6*](#) (rated PG)

Marketing and promotion

Robots: The Future is Now is the latest title in a new series looking at the modern technologies shaping our world. Planned titles include *Phones* and *Virtual Reality*, among others.

Previous titles



Planned titles

