3D PRINTING
THE FUTURE IS NOW

WOODY BRAMBLES

wild dog

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Synopsis

3D printing is being successfully used in medicine, construction and a wide range of industries. Some people believe 3D printing will make our lives easier, while others believe it may lead to negative outcomes. Take an in-depth look at this rapidly evolving technology, and how it is shaping our destiny in *3D Printing: The Future is Now*.

Writing style

3D Printing: The Future is Now has been designed with the needs of early and moderate readers in mind. The amount of text is kept to a minimum on each page, and in some cases combines primary text with smaller-sized captions. Given the subject manner, special care is taken to reduce potentially complex concepts to their barest, simplest 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 series uses an artful layout that deftly juxtaposes historical black-and-white photographs with richly detailed images from the modern day. These modern images are comprised of photographs, illustrations and vectors, and 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	Woody Brambles
ISBN	9781742034775
Format	260mm x 250mm
Extent	24pp + cover
Binding	Paperback
Reading level	7+
Interest level	7+
Category	Junior Non-Fiction

Example spreads taken from the book

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Study notes: Themes

- Descriptive words
- Modern technology
- General history of printing
- The invention 3D printing
- How 3D printing works
- Rapid prototyping
- Printing materials
- How 3D printing is used today
- DIY and handheld
- 3D printing and medicine
- Future of 3D printing

Curriculum link: Literacy

Before reading:

- Brainstorm what students know about 3D printing.
- What is their first response when they look at the cover of the book?
- Can they think of any examples of 3D printing being used today?

While reading:

- 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 3D printing and the words that were used in the book. Ask them to draw up a list of words that can be used to describe 3D printing.

Curriculum Theme: Critical and Creative Thinking

After reading 3D Printing: The Future is Now, ask the students the following questions:

- What is 3D printing?
- Why is it important?
- How long has it been around?
- Give some examples of older technology that led to the discovery of 3D printing.
- What are some examples of how 3D printing is being used today?
- How might 3D printing be used in the future?
- What is the potential impact 3D printing could have on our lives?
- Do people think 3D printing will have a positive or negative impact on our lives?

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Curriculum link: ICT Capability

After reading 3D Printing: The Future is Now:

ACTIVITY:
- Below are links to classroom activities for schools with access to 3D printers:
  - https://all3dp.com/3d-printing-for-kids-simple-3d-printer-projects/
  - https://www.makerbot.com/stories/education/lesson-plans-steam-learning/
  - https://ultimaker.com/en/resources/21890-lesson-ideas-and-starters

ACTIVITY:
- Organise the class into small groups. Assign each group a method of 3D printing from the following link: https://all3dp.com/1/types-of-3d-printers-3d-printing-technology/. Ask the groups to research their method online and answer the following questions: What is their method of 3D printing? How does it work? What material/s does it print with? What is it commonly used to make? What are its strengths and weaknesses?
- Ask the children to look for and print images relating to their method of 3D printing. Specifically, look for examples of how it is being used by humans.
- Ask each group to create a poster collage. Ask them to attach the images they found and to write a short sentence detailing what their method of 3D printing is, how it is used and what it is used to make. All members of the group then take turns presenting their findings to the rest of the class.

Curriculum Theme: Personal and Social Capability

After reading 3D Printing: The Future is Now:

ACTIVITY:
- Organise the class into two groups. In one group, ask the students to work as a team to construct a word finder puzzle. Ask each student to suggest an appropriate word about 3D printing using words they have learned from the book (e.g. additive, patent, virtual etc.). Once completed, print copies for the other group to complete.

ACTIVITY:
- In the second group, students should work as a team to create a trivia bingo game. Ask them to suggest facts they found surprising or interesting and combine them into a game for the whole class.

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Curriculum Theme: Personal and Social Capability (continued)

After reading 3D Printing: The Future is Now:

ACTIVITY:

• Ask the students to write a creative story about a future in which 3D printing has 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?
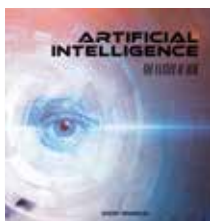
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• https://www.youtube.com/user/TheMakersMuse/videos
• https://www.youtube.com/channel/UCVc6AHfGw9b2zOE_ZGfmsnw
• https://www.youtube.com/user/RealLaurenRenee

• https://www.youtube.com/user/chickenparmi
• https://www.youtube.com/user/iliketomakestuffcom
• https://www.youtube.com/user/jamesbruton
• https://all3dp.com/1/3d-printing-classes-courses-curriculum/
• https://3dinsider.com/3d-printing-for-kids/
• http://3dprintingforbeginners.com/

Marketing and promotion

3D Printing: The Future is Now is the latest title in a fascinating new series looking at modern technologies shaping our future. Planned titles include *Robots*, *Chips*, *Phones* and *Virtual Reality*, among others.

Previous titles

Planned titles