

3D PRINTING

Can you 3D print a house? Do astronauts have 3D printers? Find out more about the science of 3D printing.

Do You Know? is a series of levelled non-fiction books featuring video content, project work and critical-thinking activities to motivate and engage young learners. Covering a range of STEM topics from nocturnal animals to climate change, *Do You Know?* takes an enquiry-based approach, developing children's language, communication and investigation skills.

Level 1 Pre-A1 • 400 headwords

Level 2 A1 • 600 headwords

Level 3 A1+ • 800 headwords

Level 4 A2 • 1100 headwords

Lexile measure 360L • Word count 574

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DO YOU KNOW?

3D PRINTING

1

Ladybird

Level 1

DO YOU KNOW?

3D PRINTING



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New words



3D



doctor



machine



plastic



flat
(adjective)



hard



printer / print
(noun) / (verb)



soft



idea



layer



strong



thing

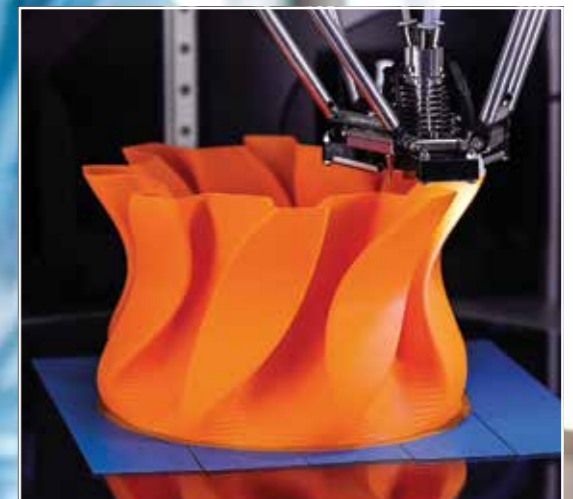
What is a 3D printer?

Lots of people have **printers**. A printer is a **machine**. A **3D printer** makes **3D things**.



3D things are not **flat**.

This is a printer. It makes flat pictures on paper.



This is a 3D-printed thing.

 **THINK!**

Draw a picture of a toy you like.
Put the picture next to the toy. Which is 3D?

How old is 3D printing?

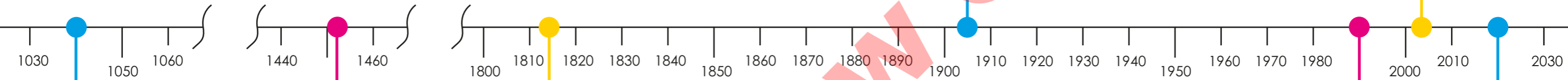
Printing is very old, but 3D printing is new.



1905 AD
Miehle Verticle press



2002 AD
Full-colour printer



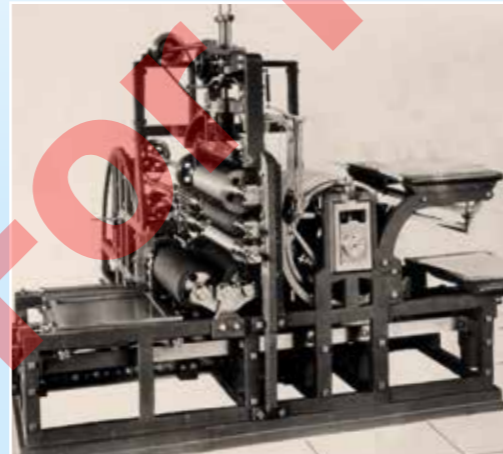
1040 AD
Bi Sheng
printing press



1452 AD
Gutenberg's
printing press



1814 AD
Koenig
steam press



1990 AD
Dot matrix
black-and-white printer



NOW
Modern 3D printer



 **FIND OUT!**

Use books or the internet to find out about a machine you use every day. Whose idea is it? How old is it?

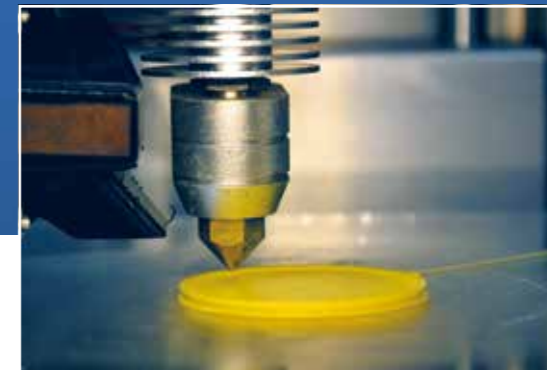
How do you 3D print?

You can draw your **idea** on a computer.

You can send your idea to the 3D printer.

The 3D printer makes lots of **layers**. The layers are hot **plastic**.

Now the plastic is cold. Cold plastic is **hard**.



 **WATCH!**

Watch the video (see page 32).

Look at this 3D printer! It makes lots of layers. What thing does it make?