

Great Inventions

Think about your home and all the things inside it. Everything was invented by someone. Many things were invented to speed up housework, some were made for enjoyment and others help us to communicate. A few make homes safer, while others make your house cleaner.

The Telephone

In 1849, Italian engineer Antonio Meucci made the first telephone. He came across the idea by accident when he was trying to find a cure for headaches. Meucci believed that headaches could be cured by electricity. During his experiments he found that when the electricity was turned on, sound travelled down the wires he was using. Meucci discovered that a pair of small cones joined together by wires, made a basic telephone.



Soon after, a very similar invention was produced by a man called Alexander Graham Bell. Sadly, Meucci was unable to prove that his telephone was the first and he failed to make any money for all his hard work.

The Vacuum Cleaner



At the beginning of the 20th century cleaning a carpet meant lifting it from the floor, carrying it outside and beating it until all the dust fell out. It was hard, dirty work. Surely there was an easier and more sanitary way to clean!

Hubert Booth, a British engineer, went to watch an inventor demonstrating a cleaning machine that blew dust from the seats of railway carriages. It certainly worked! The jet of air blew dust from the cushions – into the faces of everyone watching!

Booth thought it would be even more useful if the machine sucked the dirt up, rather than just blowing it to another place. So, he put a handkerchief on a chair cushion. Pressing his mouth against it, he took a deep breath and breathed in a lungful of dust. Once he had stopped coughing, he turned the handkerchief over.

On the back was a dark ring of dirt where his mouth had been. Using this idea, Booth bought an electric motor and pump and in 1901 built the world's first vacuum cleaner.

The Toaster

Charles Strite was so fed up with burnt toast that he invented a pop-up toaster in 1919. This meant you didn't have to stand around waiting for the bread to toast – you just put it in the toaster, and it would pop up when it was ready.



The Television



Although the invention of the television was the result of work by many people, Scottish inventor John Logie Baird is thought to be the first person to have produced an image on television.

In 1925, he created a camera, which was made up of a jumble of lenses, spinning cardboard discs and electric motors. He pointed it at the head of a dummy called 'Stooky Bill'. Amazingly, it worked. An image of the dummy appeared on the little screen.

The Microwave

During the second world war in the 1940s, Percy Spencer, an American, was working the radar – a machine used to detect enemy aeroplanes. One day, while he was working on this machine, he noticed that a bar of chocolate in his pocket had melted. He immediately realised that the microwaves from the radar machine had heated it up.

Spencer sent his assistant to buy some dry corn and put this right in front of the machine. Switching on the power, turned it instantly into popcorn!

Next, Spencer put an egg in front of the machine, flipped the switch and waited. It trembled. It fizzed. Finally, it exploded, sending shell and yolk everywhere, including on the face of his assistant!



Spencer designed his invention so that it looked like a mini-oven. The first microwave cost the same as an expensive car!

In the Future

Now that the internet is being used more, people are inventing 'smart' machines so that owners can control them by phone. Imagine being able to put some washing on by sending a message to your washing machine. One washing machine, which was made recently, can even call out the engineer when it breaks down!

Answer these questions.

1. Where could all these inventions be used?

2. Look at the section about the telephone.

What was Meucci trying to do when he had the idea for the telephone?

Tick ONE.

cure headaches	<input type="checkbox"/>
invent a cleaning machine	<input type="checkbox"/>
send sound down a wire	<input type="checkbox"/>
make money	<input type="checkbox"/>

3. Look at the section about the vacuum cleaner.

Cleaning carpets the old way was hard, dirty work.

What made it hard work?

4. The vacuum cleaner was based on another machine.

What made the vacuum cleaner different to the machine that it was based on?

5. Look at the section about the toaster.

What problems did the pop-up toaster solve?

Write TWO things.

1. _____

2. _____

6. Look at the paragraph beginning: Next, Spencer put an egg...

How does the writer make this paragraph exciting?

Give two ways.

1. _____

2. _____

7. According to the text, how might our machines be controlled in the future?

8. In what order do the inventions appear in this text?

order of importance	<input type="checkbox"/>
no particular order	<input type="checkbox"/>
alphabetical order	<input type="checkbox"/>
chronological order	<input type="checkbox"/>

9. Who invented what?

Fill in the missing information.

Invention	Inventor
vacuum cleaner	
	Charles Strite
	John Logie Bird
microwave	

10. Which two of the inventions were invented by accident?

11. Where would you expect to find this text about inventions?

in a diary	<input type="checkbox"/>
in a story book	<input type="checkbox"/>
in a non-fiction book	<input type="checkbox"/>
in an atlas	<input type="checkbox"/>

Answer Guide

Nos.	Answers	Assessment focus
1.	Home/house/ in the kitchen	Understand, describe, select or retrieve information, events or ideas from texts and use quotation and reference to text.
2.	Cure headaches	Understand, describe, select or retrieve information, events or ideas from texts and use quotation and reference to text.
3.	Answer should include reference to the following: lifting / carrying / removing (the carpets), eg: <ul style="list-style-type: none"> · because you had to carry it outside, · because the carpet might have been heavy. beating (the carpets), eg: <ul style="list-style-type: none"> · they had to bang it, · they had to beat it until all the dust came out. 	Deduce, infer or interpret information, events or ideas from texts.
4.	The machine can suck the dust up rather than just blowing it away.	Deduce, infer or interpret information, events or ideas from texts.
5.	burning toast, eg: you will not have burned toast, you did not have to stand around waiting. Do not accept it would pop up when it was ready.	Understand, describe, select or retrieve information, events or ideas from texts and use quotation and reference to text.
6.	<ul style="list-style-type: none"> · use of short sentences build tension / suggest something is about to happen, · use of specific words to create excitement, eg: (It) trembled / (It) fizzed / (Finally, it) exploded, 	Explain and comment on writers' uses of language, including grammatical and literary features at

	· use of the exclamation mark	word and sentence level.										
7.	use of a phone / internet / message.	Understand, describe, select or retrieve information, events or ideas from texts and use quotation and reference to text.										
8.	Chronological order	Identify and comment on the structure and organisation of texts, including grammatical and presentational features at text level.										
9.	<table border="1"> <thead> <tr> <th>Invention</th> <th>Inventor</th> </tr> </thead> <tbody> <tr> <td><i>vacuum cleaner</i></td> <td>Hubert and / or Booth</td> </tr> <tr> <td>toaster</td> <td><i>Charles Strite</i></td> </tr> <tr> <td>television / TV</td> <td><i>John Logie Baird</i></td> </tr> <tr> <td><i>microwave</i></td> <td>Percy and / or Spencer</td> </tr> </tbody> </table>	Invention	Inventor	<i>vacuum cleaner</i>	Hubert and / or Booth	toaster	<i>Charles Strite</i>	television / TV	<i>John Logie Baird</i>	<i>microwave</i>	Percy and / or Spencer	Understand, describe, select or retrieve information, events or ideas from texts and use quotation and reference to text.
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11.	in a non-fiction book	Relate texts to their social, cultural and historical contexts and literary traditions.										