

Activity 1

Read the text and discuss the two questions.

When we think of inventions we often talk about 'big' inventions like the motor car, the jet engine and the computer. But some of the most important inventions are very small. Things we use every day, without thinking – 'Wow, I wonder when this was invented?'

1. Can you think of anything you use a lot?
2. When was it invented?

I write a lot. I always use a pen, but I don't know when it was invented.



Activity 2

Read the texts and answer the questions.



Team A

1. Who invented the teabag?
2. What was Percy Shaw doing when he had his idea?
3. Which invention might you find in a kitchen and a church?
4. How much did Walter Hunt sell his idea for?
5. What nationality was László Biró?
6. Who invented toilet paper?
7. How did people use to open metal cans?
8. When was the paperclip invented?





Team B

1. What was invented in 1870?
2. Where did the Scott brothers sell their product?
3. What were Sullivan's customers doing with his invention?
4. What was the nationality of the inventor of the paperclip?
5. How much was Walter Hunt's debt?
6. When do people use hourglasses nowadays?
7. Who invented the ballpoint pen?
8. When was the Cat's Eye invented?



Team C

1. What was invented in 1935?
2. Who invented the can opener?
3. What did Walter Alcock do?
4. What was Thomas Sullivan's occupation?
5. What did Johann Vaaler use his invention for?
6. What made Walter Hunt's safety pin different from other pins?
7. Which of the inventions is the oldest?
8. What is the Cat's Eye used for?



Team D

1. When was the safety pin invented?
2. What was wrong with John Loud's invention?
3. What is another name for an hourglass?
4. What were the first teabags made from?
5. What gave Percy Shaw the idea for his invention?
6. What did Peter Durand invent?
7. When was the first toilet paper invented?
8. Who invented the first paperclip?





Team E

1. When was the can opener invented?
2. How did the Scott brothers improve toilet paper?
3. Who invented the safety pin?
4. Which of the inventions measures time?
5. What is the difference between the modern paperclip and the original?
6. What surprised Thomas Sullivan?
7. Who invented the Cat's Eye?
8. What did John Loud use his invention for?



Texts



In 1849 Walter Hunt, an inventor from New York, was sitting at his desk trying to think of a way of paying off a debt of \$15. While he was thinking he was twisting a piece of wire and came up with the idea of the 'safety pin.' The difference between Hunt's 'safety pin' and other pins was that his one had a clasp, or catch, to hold the sharp pin in place. A few weeks later he sold the rights to his invention for \$400.

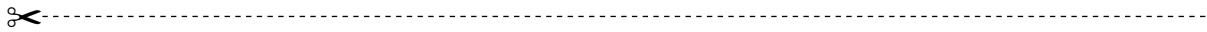


In 1908 Thomas Sullivan, a tea and coffee merchant from New York, started packing his tea in little silk bags to give away as samples to his customers. To his surprise many of his customers came back, not for his tea, but for the bags. He found out that they were putting the bags directly into the boiling water. Later on people started making the teabags from very thin paper.

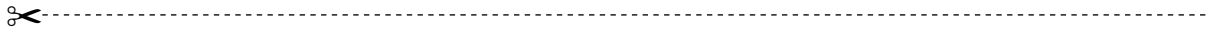


In 1810 Peter Durand invented a metal can for preserving food. The advantage of the can was you could keep the food for quite a long time. The problem was that the only way to open it was using a hammer and chisel! Almost 50 years later, in 1858, Ezra Warner invented the first can opener. The modern-day can opener, using a rotating wheel with a sharp edge wasn't invented for a further 12 years.

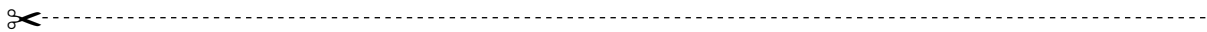




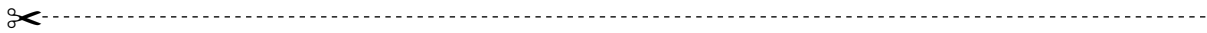
In 1888 John Loud, a leather merchant, invented the ballpoint pen. He used his invention for marking the leather he worked with. However, his pen had one big problem – it leaked. Almost 50 years later, in 1935, two Hungarian brothers György and László Biró came up with a new ink and pen that didn't leak. Now millions of bios are sold each year.



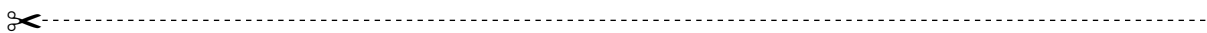
Like many inventions, what we use today doesn't look the same as the original invention. That is certainly the case with the paperclip. The original paperclip was invented in 1890 by Johann Vaaler, a Norwegian. His paper clip was a piece of metal wire with a triangular 'tongue'. However, even though the shape was different, the use was exactly the same. Vaalar used his paperclips for keeping pieces of paper together on his office desk.



In 1933 Percy Shaw was driving along a country road at night. It was dark and Shaw couldn't see where he was going. Suddenly he saw two lights and he stopped his car and got out. There at the side of the road was a cat. Shaw realised that his car lights were reflected by the eyes of the cat. He went home and a few weeks later invented the Cat's eye, or road reflector. Now there are millions of these on roads around the world, helping drivers stay on the road at night.



In 1867 two brothers, Thomas and Clarence Scott, began selling toilet paper on the streets of Philadelphia. Although they didn't invent toilet paper, their product was much better than anything sold before. Ten years earlier Joseph Gayetty had invented toilet paper, but he sold it as loose pieces of paper. A few years later Walter Alcock put the paper on a roll, but the Scott brothers improved it further by adding perforations (tiny holes) making it easy to use.



The hourglass, or sand clock, was probably invented in the 14th century, although we can't be sure. The first written records of an hourglass are from 1338. The hourglass had many uses including being used on ships, in churches and for cooking. Today many people still use an hourglass when they are cooking eggs in water. Traditionally, the hourglass is made of two glass bulbs connected by a narrow glass tube and contains sand.



Activity 3

What's the past form of these verbs?

e.g. invent invented
 have / has had

- 1. begin _____
- 2. come _____
- 3. find _____
- 4. get _____
- 5. go _____
- 6. improve _____
- 7. leak _____
- 8. make _____
- 9. see _____
- 10. sell _____

Check your answers by looking at the texts.

Inventions

Adrian Tennant

Level

Pre-intermediate/Intermediate

Topic

Inventions

Subject(s)

Science & History

Time (approx)

Activity 1: 10 – 15 minutes

Activity 2: 20 – 30 minutes

Activity 3: 5 – 10 minutes

Preparation

Activity 1: One photocopy for each student.

Activity 2: One or two photocopies of the texts cut up and stuck around the classroom & one set of questions per group.

Activity 3: One photocopy for each student.

Activity 1

- 1 Hand out a copy of the worksheet and ask the students to read the short text.
- 2 Put the students into small groups and get them to discuss the two questions.
- 3 Monitor and help where necessary.
- 4 If any of the groups are finding it difficult to think of inventions to talk about, get them to look at the pictures.
- 5 Open up to a class discussion.

Activity 2

- 1 Cut up the eight texts and post them around the room on the walls.
- 2 Cut up the questions sheets – so that you have one per team.
- 3 Divide your students into five teams: A – E. In classes of over 20 students

make more teams (four-five students per team is a good number) and just give two teams the same set of questions.

- 4 Explain that there are eight texts about different inventions around the room. The task for your students is to find the answers to their questions.
- 5 Hand out the questions – one set to each team.
- 6 Set a time limit e.g. 15 minutes.
- 7 If a team claim they have finished, quickly check the answers.
- 8 At the end, put the students into new groups – with one student from each of the original groups – and ask them to tell each other what they learnt.
- 9 Finally, put the students back in their original teams and give them the answers to their questions. If students have the wrong answer, encourage them to go and look at the texts again.
- 10 Monitor and help where necessary.

Alternative procedure

If you are worried that your students will get too many answers wrong you can cut up the questions for each team. Keep them in sets on a table at the front of the class.

Ask each team to send up one member and give them the first question.

They then go back to their team and share the question.

The team try to find the answer – as soon as they have they bring the question back and tell you the answer. If it is correct you give the team their next question.

Doing the activity this way you are monitoring whether or not the team has found the correct answer. They can only move on to the next question when they've found the correct answer to the preceding question.

Answers

Team A

- 1 Thomas Sullivan
- 2 Driving along a country road
- 3 An hourglass
- 4 \$400
- 5 Hungarian
- 6 Joseph Gayetty
- 7 With a hammer and chisel
- 8 1890

Team B

- 1 The modern-day can opener
- 2 Philadelphia
- 3 Putting the bags directly in hot water
- 4 Norwegian
- 5 \$15
- 6 When they are cooking eggs
- 7 György and László Biró
- 8 1933

Team C

- 1 A ballpoint pen & ink that didn't leak
- 2 Ezra Warner
- 3 He put toilet paper on a roll
- 4 He was a tea and coffee merchant
- 5 Keeping pieces of paper together
6. It had a clasp / catch
- 7 The hourglass
- 8 To help drivers stay on the road / see the road at night

Team D

- 1 1849
- 2 It leaked
- 3 Sand clock
- 4 Silk
- 5 A cat (sitting at the side of the road)
- 6 A metal can (for preserving food)
- 7 1857
- 8 Johann Vaaler

Team E

- 1 1858
- 2 They added perforations (tiny holes)
- 3 Walter Hunt
- 4 The hourglass
- 5 The shape
- 6 That his customers came back to buy the bags
- 7 Percy Shaw
- 8 Marking the leather (he worked with)

Activity 3

- 1 Put students into pairs or small groups.
- 2 Hand out a copy of the worksheet and ask the students to discuss the past tense forms of each verb.
- 3 Remind the students that they have read/seen all the verbs in the texts about inventions.
- 4 If the students get stuck tell them to go and check the texts.
- 5 Monitor and help where necessary.
- 6 Check the answers as a class.

Answers

- | | |
|---------|------------|
| 1 began | 6 improved |
| 2 came | 7 leaked |
| 3 found | 8 made |
| 4 got | 9 saw |
| 5 went | 10 sold |

Useful websites

Fantastic site with lots of interesting information about inventions and inventors.
<http://www.enchantedlearning.com/inventors/indexa.shtml>