

BBC 6-minute comprehension questions

Aim: to develop the students' ability to listen to a six-minute talk, to take notes and then use those notes to answer a range of open comprehension questions.

Lesson Time: Approximately 30 minutes + critical thinking.

Link: <https://www.bbc.co.uk/programmes/p0bcqv3d>

Lesson Plan

Lead in

- Ask Students to discuss the 'title' and predict the content of the lecture.
- Ask students to write down key terms / language from the discussion.
- Feed in / check key vocabulary from the webpage.

Three types of lesson

Lesson#1: [hard]

1. Students listen once and take notes.
2. Give 2-3 minutes to tidy notes.
3. Students listen again and add to their notes (use a different colour pen).
4. Give out the questions. Set 10 minutes to answer the questions from their notes.
5. Feedback: distribute or project answers.
6. Critical thinking discussion.

Lesson #2: [medium]

1. Students listen once and take notes.
2. Give out the questions: Set 5-10 minutes to answer the questions from their notes.
3. Students listen again and answer the remaining questions as they listen.
4. Give an extra 3 minutes to consolidate answers.
5. Feedback: distribute or project answers.
6. Critical thinking discussion.

Lesson #3: [easy]

1. Give out questions. Students have up to 3-5 minutes to look at the questions.
2. Students listen and answer the questions.
3. Give 3 minutes to tidy their answers.
4. Students listen again. They check their answers and answer the questions they missed.
5. Set 3 minutes to tidy their answers.
6. Feedback: distribute or project answers.
7. Critical thinking discussion.

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Algorithms

Link: <https://www.bbc.co.uk/programmes/p0bcqv3d>

Answer the following questions:

1. What are algorithms?
2. How do algorithms work?
3. Which famous scientific equation can be thought of as a three-part algorithm?
4. How long have algorithms been around?
5. Why is the use of algorithms controversial?
6. What, according to Ramesh Srinivasan, does the word 'algorithm' mean?
7. How does the speaker define the term 'bogyman'?
8. According to mathematics professor Ian Stewart, how does the algorithm 'bubble sort' work?

Critical thinking: What comes to mind when you hear the word 'algorithm'? Can you name three examples of algorithms in everyday life? The speaker told the audience how long algorithms have been around; did this surprise you? Why/not? The speaker gave an example of how algorithms can be controversial; can you think of a similar example? Have you heard of the bogyman before? Do you use a term like this in your language?

Algorithms **ANSWERS**

1. What are algorithms?
The answer is that they all use algorithms – sets of mathematical instructions which find solutions to problems.
2. How do algorithms work?
Computers do this in more a complicated way by repeating mathematical equations over and over again.
3. Which famous scientific equation can be thought of as a three-part algorithm?
And the most famous scientific equation of all, Einstein's $E=MC^2$, can be thought of as a three-part algorithm.
4. How long have algorithms been around?
You might think algorithms are a new idea. In fact, they've been around since Babylonian times, around 4,000 years ago.
5. Why is the use of algorithms controversial?
And their use today can be controversial. Some algorithms used in internet search engines have been accused of racial prejudice.
6. What, according to Ramesh Srinivasan, does the word 'algorithm' mean?
It's the set of instructions that you write in some mathematical form or in some software code – so it's the repeated set of instructions that are sequenced, that are used and applied to answer a question or resolve a problem.
7. How does the speaker define the term 'bogyman'?
The bogyman refers to something people call 'bad' or 'evil' to make other people afraid.
8. According to mathematics professor Ian Stewart, how does the algorithm 'bubble sort' work?
Think of when your computer is sorting emails by date and maybe you've got 500 emails and it sorts them by date in a flash. Now it doesn't use bubble sort, but it does use a sorting method and if you tried to do that by hand it would take you a very long time, whatever method you used.