

An Interview with Nixie Labs



Question Book:

Year 6, pages 2-3

Author / Source:

<http://antenna.sciencemuseum.org.uk>

Genre:

Non-fiction — interview

Cross-curricular links:

- History (famous inventors)
- Science (technological innovation)
- D&T (testing prototypes)

Introduction

In this interview, computer scientist Floris Ernst describes his work on Nixie, the world's first simple, wearable drone. The interview provides pupils with a first-hand insight into the design and development process behind this cutting-edge technology. Ensure pupils are aware that, in this context, a drone is a small, unmanned aircraft. As they read, pupils should consider what the interview tells them about the process by which scientists and engineers develop new technologies.

Answers

1. E.g. To automatically take photographs of its owner.
2. E.g. Because it is difficult for them to use a camera while they are climbing, so Nixie will allow them to take photos of themselves safely while climbing.
3. E.g. Because they could be used to spy on people and take photos or videos of places that are supposed to be private, for example by flying over people's gardens or looking through windows.
4. E.g. To get a better view of dangerous situations, and to help locate people who need to be rescued.
5. Any appropriate answer. E.g. He is very positive about Nixie, and it seems like he is very passionate about the project — the use of exclamation marks shows this enthusiasm.
6. Any appropriate answer. E.g. Yes, because it would be fun to have a flying camera that could take photos from any angle, especially one like Nixie that would be light and easy to use. OR E.g. No, because it might be used to spy on people. Also, it could be dangerous because it might hurt someone if it crashed.

Extra Activities

- Get pupils to use the information in the interview to design a poster persuading people to buy Nixie. Encourage them to think about how they can use language to make their poster as persuasive as possible.
- Ask pupils to research other inventors and their inventions, such as James Dyson, Trevor Baylis, Mary Anderson, John Logie Baird and Stephanie Kwolek. Pupils should present their findings in the form of an imagined interview with the inventor, using similar questions to those asked in the Nixie interview.
- Using the interview as a starting point, explore the process of technological innovation. Key points to cover include the value of teamwork in developing new technologies; the importance of experimentation in the development process; and the use of prototypes to test and improve design features.
- Working in small groups, challenge pupils to design an aeroplane, made only from A4 sheets of paper, that will fly as far as possible. Once they have designed and built their first prototype, they should test it and use the outcome of the tests to build an improved version of their design. Get pupils to draw a diagram of their final design, annotating the features they added to make it fly further.

