

Designing My Electronic Invention with Kit the Fox

Learning objective: To design and explain a functional electronic product using switches, cells, and bulbs, considering the needs of the user.

Use this writing frame to describe your electronic invention. Think carefully about how your circuit works and why your design is useful for a specific person.

My invention is an innovative electronic device designed to solve a daily problem for its user.

Word bank: furthermore · consequently · in addition · specifically · the circuit consists of · to ensure safety · this feature allows · consequently · however

1. What is your invention called and who is the target user? Start by saying: My invention is called the... and it is designed for... (2 marks)

2. How will your product use electricity? Describe the components you have chosen. Start by saying: To make this product work, I have included a circuit containing... (3 marks)

3. Explain how the switch controls the flow of electricity. Start by saying: The switch is a vital part of my design because... (2 marks)

4. Why is your design suitable for the user? Start by saying: This invention is perfect for the user because it helps them to... (2 marks)

5. What steps did you take to ensure your product is safe to use? Start by saying: To ensure the product is safe, I have... (2 marks)

Extension challenge: Kit the Fox wants to know if your invention could be improved. Explain one way you could add a second bulb or a buzzer to your circuit to make it more effective. How would this change the function of your device?