

Design Technology: The Fabric Expert's Challenge

Learning objective: To understand the properties of textiles and select suitable materials for specific products based on their characteristics.

Max the monkey is designing a new range of accessories, but he needs your help to choose the right materials! Read the descriptions of the fabric properties below. Then, match each material to the correct item Max wants to make by filling in the blanks. Use the word bank to help you.

Word bank: Cotton · Wool · Polyester · Denim · Felt · Silk

1. 1. Max wants to make a soft, warm jumper for winter. Which fabric should he choose because it traps heat well? (2 marks)

2. 2. Max is making a pair of sturdy, hard-wearing trousers for his outdoor climbing adventures. Which fabric is best for this? (2 marks)

3. 3. Max is designing a light, breathable t-shirt for summer. Which natural fibre would be most comfortable? (2 marks)

4. 4. Max needs a fabric that does not fray when cut, so he can make shapes for an art project. Which material is best? (2 marks)

5. 5. Explain why you would choose a waterproof synthetic fabric like polyester for a raincoat instead of wool. (3 marks)

Draw: Draw a design for a new school bag. Label your drawing with the type of fabric you have chosen and explain one reason why that fabric is suitable for a bag.



Extension challenge: Imagine Max has a budget of £15 to buy fabric for a craft project. He finds cotton for £3 per metre and denim for £5 per metre. If he buys 2 metres of each, how much change will he get from his £15?