

Max's Design Workshop: Making Prototypes

Learning objective: To understand what a prototype is and why we make one before building a final product.

Max the monkey wants to build a new fruit-sorting machine! Read the questions carefully. Use the word bank to help you complete your answers. You can use the sentence starters to help you begin.

Word bank: prototype · test · mistakes · improve · model · design

1. Max makes a simple model of his machine using cardboard before he builds the real one. What is this simple model called? (Clue: It starts with a p) (1 mark)

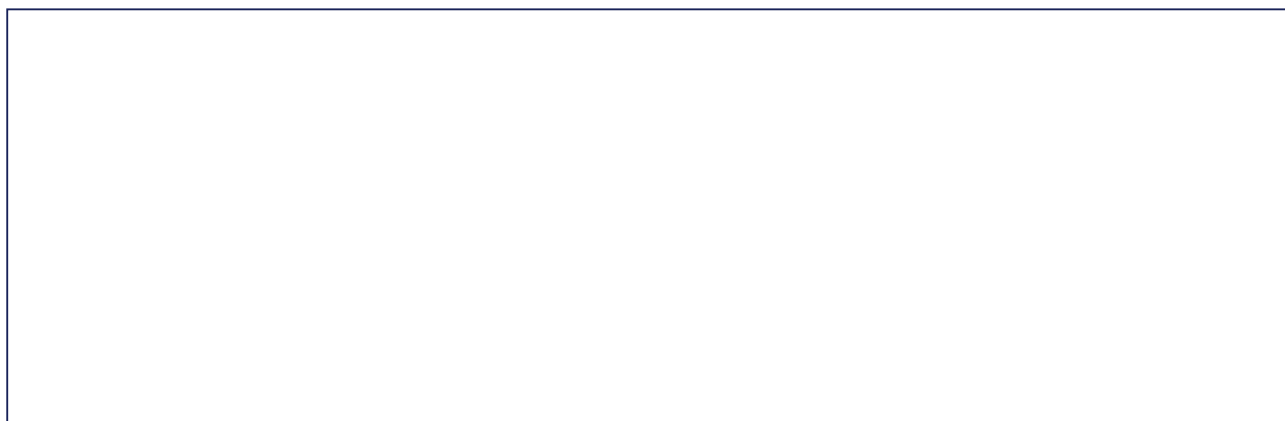
2. Why is it a good idea to build a prototype first? Use this sentence starter: I make a prototype because... (2 marks)

3. If Max finds a problem with his prototype, should he stop or try to fix it? Explain why. (2 marks)

4. Look at the list below. Tick two items that are good materials for a quick prototype:

- Cardboard
- Solid steel
- Masking tape
- Concrete (2 marks)

Draw: Draw a simple prototype of a new pencil case. Label two parts of your drawing (for example: 'the zip' or 'the side wall').



Extension challenge: If your prototype was too small, how would you change your design to make it bigger? Write one sentence about your plan.