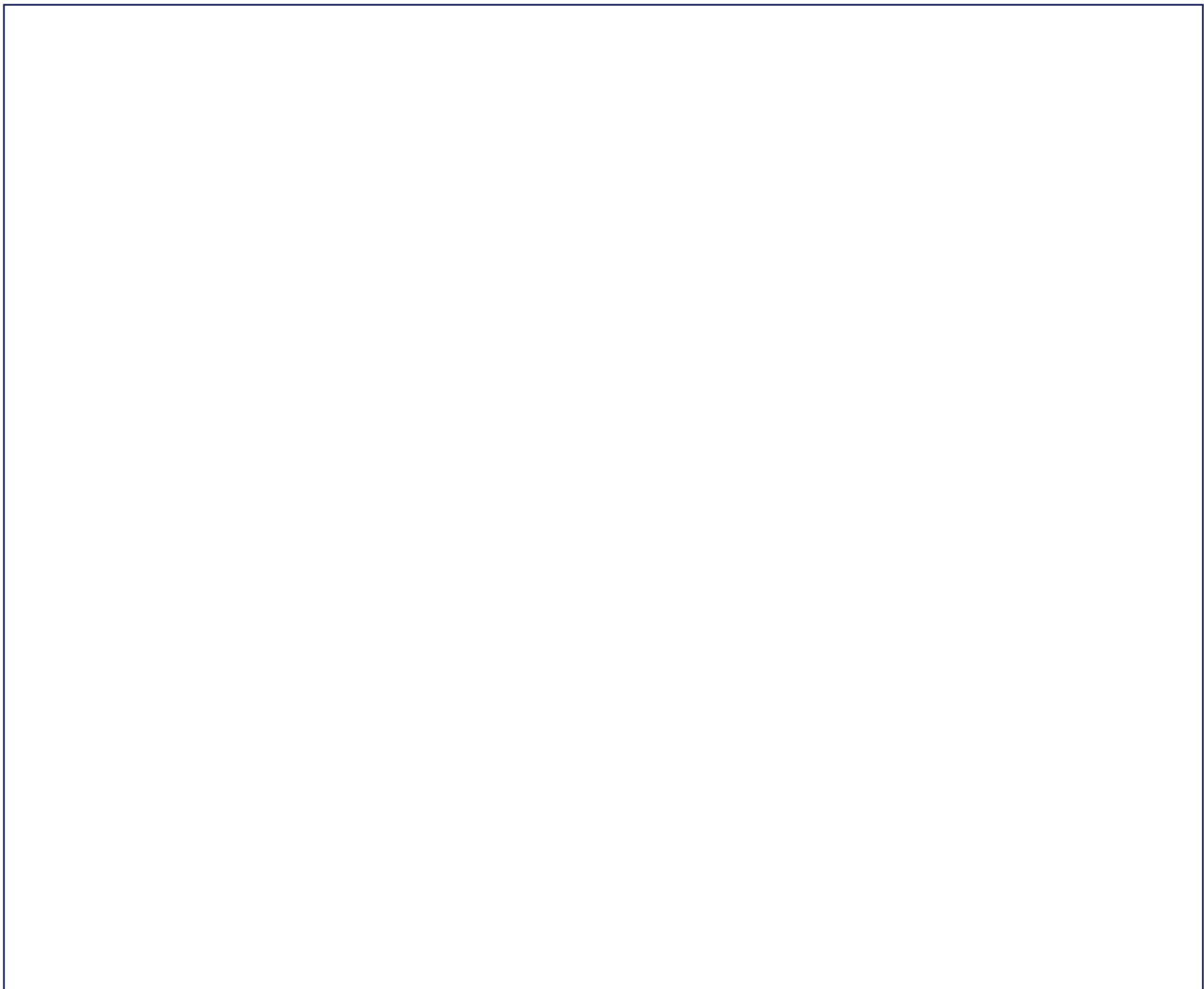


Design Technology: The Prototype Workshop

Learning objective: To understand the purpose of prototyping and how to communicate design ideas through detailed technical sketches.

Max the monkey is designing a new sustainable lunchbox. Before he builds the final version, he needs to create a prototype. Use the space provided to sketch your own lunchbox prototype. Ensure you label your design to explain how it works.

Draw: Draw a technical sketch of a lunchbox on a piece of graph paper. The style should be clean and precise, using straight lines and clear labels. Include an 'exploded view' bubble showing how the lid attaches to the base with a hinge.



Label words: compartment · hinge · fastening · recycled material · insulation · ergonomic handle

Steps:

1. Step 1: Draw your lunchbox design in the centre of your page. Include a way to keep food separate.
2. Step 2: Label three parts of your design using the word bank provided.
3. Why is it important for Max to build a prototype before making the final lunchbox out of expensive materials?
4. If your lunchbox costs £4.50 to make, and you sell it for £7.00, what is the profit per lunchbox?
5. Suggest one material you could use for your prototype that is cheap, easy to cut, and widely available.