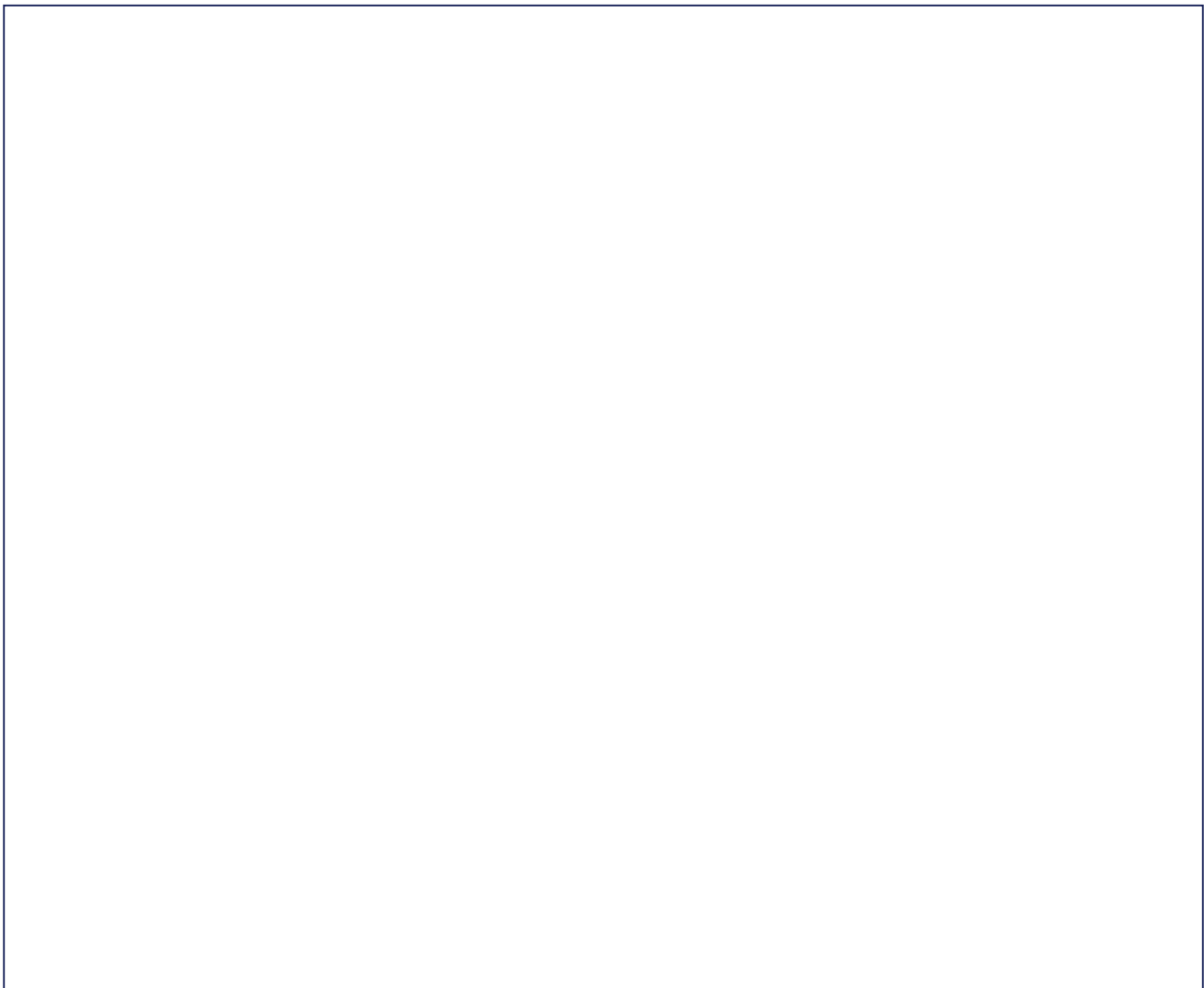


Design Technology: The Prototype Workshop

Learning objective: To understand the purpose of a prototype and use technical drawing skills to communicate a design idea for a functional product.

Max the Monkey is designing a new 'Homework Organiser' for his desk. He needs a prototype—a first model—to test if his ideas work. Follow the steps below to sketch your own design for a desk organiser. Use the word bank to label your invention.

Draw: Draw a 3D view of an original desk organiser. Use a sharp pencil to draw the main structure, then use a ruler to add clear lines. Include an area for storing pencils, a clip for important notes, and a small drawer. Add 'leader lines' (straight lines pointing to parts of your drawing) to label your design using the vocabulary from the word bank.



Label words: Prototype · Materials · Function · Dimensions · Joints · Annotation

Steps:

1. Why is it important to create a prototype before making a final product? Give one reason.
2. Step 1: Draw your 'Homework Organiser' in the space provided. Make sure to include a compartment for pens and a slot for a notebook.
3. Step 2: Label your drawing using three words from the word bank to show how your organiser will work.
4. If your prototype was made of recycled cardboard, how would you join the pieces together safely?

5. Max wants his organiser to fit in his tray. What units of measurement should he use to label his dimensions (e.g., cm or kg)?