

Max's Design Technology Workshop: Planning My Prototype

Learning objective: To understand the purpose of prototyping and to plan the design of a functional product.

Max the monkey loves solving puzzles, and he knows that every great invention starts with a prototype! Use this writing frame to describe your design idea, explain your choice of materials, and plan how you will test your prototype to make sure it works.

A prototype is a simple, early version of an invention that helps us test if our ideas will really work before we build the final product.

Word bank: firstly · furthermore · specifically · in addition · consequently · for the purpose of · durable · functional · adjust · evaluation

1. What is the primary function of your product, and who is your target user? Start by saying: My product is designed to... (2 marks)

2. Which materials will you use to create your prototype and why are they suitable? Start by saying: I have chosen to use [material name] because... (2 marks)

3. What steps will you take to assemble your prototype? Use sequence words. Start by saying: To construct my prototype, I will first... (3 marks)

4. How will you test if your prototype is successful? Start by saying: To evaluate my prototype, I will test it by... (2 marks)

5. What might you need to change or improve after your first test? Start by saying: If my prototype does not work as expected, I will adjust it by... (2 marks)

Extension challenge: Max challenges you: If your prototype was to be sold in a shop, how much would it cost to make? If your materials cost £2.50 and you want to make a profit, what price would you set your product at?