

1. DESIGN A BOAT

AGE 7-11

Resources



Plasticine



Dried peas



Container (eg butter carton) of water

Introduction

Explain that the children will design and make a boat to take the maximum number of passengers with the given materials. For fair testing give each group the same amount of plasticine.

Activity

Suggest they first roll the plasticine into a ball and put it into the water. What happens? (It sinks). Now see if they can get it to float.

Once they have it floating can they get it to take some 'passengers' (dried peas)? Can they alter the shape so that the boat will take more 'passengers' before it sinks?

Plenary

Whose boat takes the most 'passengers'? Why?

Look at existing boats and discuss their design and how successfully they would take passengers.

Follow up session

Make a Cartesian diver (see session Making a diver).