



**It has been raining a lot lately! Let's have some fun on those rainy days and see if we can create a boat that doesn't sink!**

**Summary:** use whatever you have to hand at home to build a boat, and see if it can carry different objects across the water

Set-up: 10 mins preparation, 30 mins until ready

Play: 30 mins – 2 hour

Complexity: Varying complexity according to ability

### **Materials**

Recycled boxes

Tubs

Plastic trays

Plastic straws

Aluminum foil

Clay

Plasticine or blu-tack

Paper

Tape

Glue

A bath tub or sink to test the boat

A set of uniform items, such as coins, marbles, small blocks, or tin cans, as boat "cargo" to test the boat's flotation capacity

What to do

Challenge your child to build a boat that floats and can't be sunk. Get out your supplies and get them to think about what they might use for a boat. Ask questions such as what's important in

the design of a boat? What shape does it need to be? Why is that? Are all these materials waterproof? If not, could you make them waterproof?

**Explain** that after the boat is made, you will see if it can carry some of the objects you have chosen for the flotation test (coins, marbles, small blocks, or tin cans). If several family members each design and build their own boat, you can have a competition to see whose boat can hold the most “cargo” before it sinks. Count the objects into the boat one by one, and find out: whose boat can hold the most? (Ask older children to work out how many more, and so on).

### **Extensions**

Limit the materials you give your child: for example, give them just a 30cmx30cm piece of foil and challenge them to make a boat out of that.

Ask your child to design a boat for a specific item – a toy, vehicle, or a soup can (heavy!).