**FRUITY BOATS – SINKING AND FLOATING EXPERIMENT**

Objects float when they are less dense than the fluid they are in. If you dropped a tennis ball and a marble into a bucket of water the marble would sink and the tennis ball float. This is because a tennis ball is full of air (it is not very dense) and a marble is solid (it is very dense). Huge ships float because although they are extremely heavy, they have a lot of empty space inside. Lemons float as they have lots of air pockets in the thick skin. The inside of a lemon actually sinks!

What do you think of our fruity lemon boats?

### **WHAT YOU NEED** TO MAKE A FRUITY BOAT

* Lemons, limes, melon or anything else with a thick skin.
* Small sticks – we used cake pop sticks
* Paper to make sails
* Double sided tape – for the sails.

### **HOW TO MAKE A FRUITY BOAT**

* Hollow out the fruit, I managed to cut the lemon and lime so we could still use them.
* Decide how to cut the fruit to make the best shaped boat.
* If the skin is thick enough, stick the stick into the flesh, else use a bit of play doh to keep it secure.
* Add your sail and see if it floats.

***( ask an adult to help with the cutting )***

### FRUITY BOAT – **EXTENSION ACTIVITY**

If you add more weight do the boats still float or sink?

Can you predict which boats will sink and which float before putting them on the water? Make a table to show your results.

What happens if you blow the boats? Can you have a race with a friend?

How can you make the boat change direction?