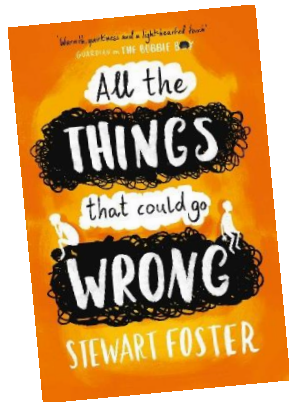


THERE ARE TWO SIDES TO EVERY STORY

Down on the seafront, two Brighton school boys are forced together to build a raft over the summer holidays.



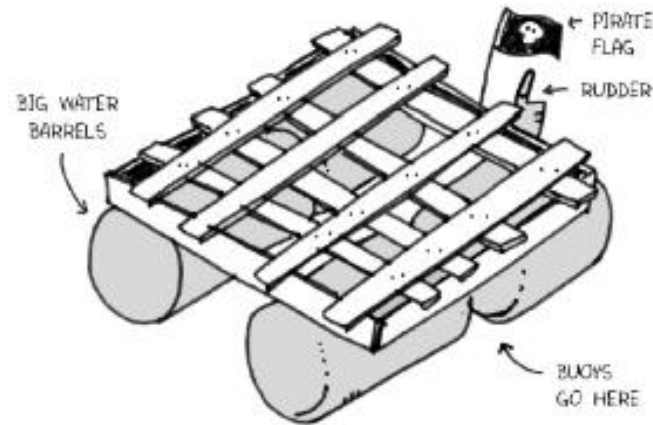
DAN is angry.
Nothing has been the same since Ben, his big brother left and he's taking it out on the nearest and weakest target:
ALEX.



ALEX is struggling.
His OCD makes it hard for him to leave the house, especially when DAN and his gang are waiting for him at school...

Ben sketched a raft and we made a list of all the things that we needed, like pieces of wood and floats. The next day we saw some old buoys on the shore and Ben and me got some planks of wood from a warehouse. We were going to build it in the summer holidays, and then Ben started hanging out with some new friends. I still wanted to build it and kept on at him to help, but he was never around, and that was before he went away. I thought he'd forgotten all about the raft, but then suddenly he sent me a proper drawing and instructions so I could make a start before he comes home.

p.44



OTHER THINGS WE NEED:

- + BIG WATER BARRELS (ASK DAD IF WE CAN HAVE THE ONES IN THE GARDEN)
- + BUOYS (IF DAD WON'T LET US)
- + EMPTY BOTTLES (WE ALREADY GOT SOME BUT NEED LOADS)
- + SAIL (ASK MUM FOR A SHEET)
- + RUDDER
- + ANCHOR
- + PIRATE FLAG

p.77

Why do some objects float and others sink?

To help answer this you are going to build a miniature raft

Can I make a raft that floats using these materials?

Wooden lolly sticks



cotton reels



string



You will also need:

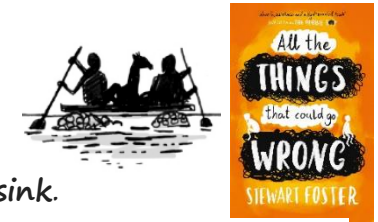
A large tub, or washing up bowl filled with water



Plasticine to make models, small plastic figures
or similar

Can I make a raft that floats when I add objects/weight to it?

Investigate if your raft will still float when you add objects to it.



Teaching notes – Building a miniature raft

Focus on properties of liquids, gases and solids. Objects with tightly packed molecules are denser and sink.

Objects with more loosely packed molecules are less dense and float. Whether an object sinks or floats depends on its density.

Consider: prediction → observation → testing → reflecting → suggested improvement

The children should work in pairs chosen randomly via lolly sticks or names in a hat – linking directly to how Alex and Dan are given no choice about working with each other. Link to **PSHE discussion** referring to the premise of the story and the quotes about Alex and Dan.

In pairs, the children then have to make a raft from lolly sticks, cotton reels and string – mirroring the actual materials from the book (planks, barrels and rope). To represent Alex and Dan on the raft, use two plasticine models, small plastic figures or similar. To see if the raft floats, fill a large plastic tub or washing up bowl with water. Test once *without* the figures, then test with one, then with both to see if it still floats. Discuss the impact of adding weight.

Other activities:

Consider how to make the raft move on the water without touching it. How far can it travel? (Predict, test and record)

In the original design from the book, there is a rudder and an anchor – discuss the purpose of these.

In the story, Alex and Dan have a mascot for their raft (you'll have to read the story to find out what it is!). Design a mascot for your raft.

PSHE Evaluation:

Ask the children what they thought about being put with a random partner. How did it make them feel? How well did they work together? What problems did they overcome and how did they achieve this? Can they predict how Alex and Dan might get on?