Escape the Island 1
There has been a shipwreck and you have been washed ashore on a deserted island. All is not lost though. You find that some useful items have also been washed up. With these items and some survival skills that you have learnt on your travels, you are confident you can stay alive... but can you ESCAPE THE ISLAND?

To survive and escape, you need to complete six challenges in order. After you have completed each challenge, click on me to move to the next one. Good luck!
You’re thirsty after being washed up on the beach and decide to make fruit punch with some fruit you have found and a measuring jug which has also been washed ashore.

You squeeze some mango juice and some lime juice into the jug. You have 150ml of juice so far.

a) How much pineapple juice will you need to add so that you have 350ml juice altogether?

b) If you have twice as much mango juice as lime juice, how much mango juice do you have?

(Give your answers in ml.)
You decide to try to catch some fish with a net you have found on the beach, watched by some hungry pelicans.

You manage to catch 22 fish and decide to share them with the pelicans.

a) You give six pelicans three fish each. How many are left for you?

b) How many fish would you need to feed 26 pelicans three fish each?
You realise that there is a storm coming and estimate that it will reach the island at 5pm. You decide to make a shelter and collect some fruit.

For the shelter, you use driftwood and rope which has washed up on the beach and palm leaves for the roof.

You start building at 1:45pm. If the shelter will take $2\frac{1}{2}$ hours to build and it will take another 25 minutes to collect the fruit.

Will you have time to do both before the storm hits?

Explain your answer.
You decide to make a large SOS sign on the beach to signal to any planes flying overhead that you need help.

You make the first ‘S’ with rocks and calculate that you will need the same number of rocks to make the other ‘S’ and the same number, plus three extra rocks to make the ‘O’.

a) How many rocks will you need altogether to spell SOS?

b) When the sign is finished, you realise it is not big enough. How many more rocks will you need to make your sign three times bigger?
You find a cave and decide to explore. Scratched onto one wall is a set of tally marks. You realise that someone may have been stranded on the island before and wonder if there is one tally mark for each day they were here. If this is the case:

a) How many weeks were they on the island?

b) How many full months is this? Explain your answer.
You find an old boat and decide to attempt an escape from the island. You patch up the boat as best you can, collect your belongings, some homemade oars, some food and drink and push the boat out into the sea.

You soon find that the boat has a small leak. Fortunately, you have brought the measuring jug and can use it to pour out the water.

a) If 1 litre of water leaks into the boat every 30 minutes, **approximately** how many times will you have to fill the measuring jug and pour the water away every hour? **Explain your answer.**

b) If it takes you $2\frac{1}{2}$ hours to reach land. How many litres of water will you have had to collect and pour away?
Did you escape?

Ask someone to check your answers. If you managed to answer all of them correctly, you have escaped. **Well done!**

If you got any of the questions wrong, don’t worry, you can go back and try again!