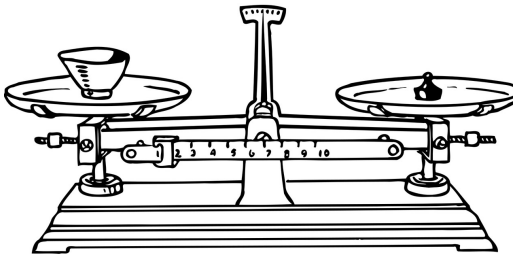


10th May

Memory Verse

Behold, the nations are as a drop of a bucket,
and are counted as the small dust of the balance:

behold, he taketh up the isles as a very little thing. Isaiah 40:15



Younger children can learn the words in **bold**. “He” here is God. The picture of the “small dust of the balance” can be demonstrated using kitchen scales – especially if you have the kind which are a real balance. If you sprinkle a tiny amount of flour into the scale pan – like a little dust – it will make no visible difference to the reading. It is insignificant.

Something to read from History

Henry Morton Stanley, who searched for and found David Livingstone in the heart of Africa¹ died on **May 10th** 1904. He was born in Wales but his parents died while he was still a small boy and he was brought up in a workhouse until he was old enough to go and work for a brutal master. When he was 15 he ran away to sea, working his passage across the Atlantic as a cabin-boy.

In America he was helped by a kindly merchant named Stanley and the young man changed his name, Rowlands, to Stanley out of gratitude. In time he became a journalist and was chosen to lead an expedition to Africa in search of Dr. Livingstone, who was feared dead.

Stanley found Livingstone at a place called Ujiji on Lake Tanganyika. He wrote at the time:

There is a group of the most respectable Arabs, and as I come nearer I see the white face of an old man among them. He has a cap with a gold band around it; his dress is a short jacket of red blanket cloth; and his pants [American for trousers] – well, I didn't observe. I am shaking hands with him. We raise our hats, and I say, “Dr. Livingstone, I presume?” and he says, “Yes.”

Stanley's report of finding Livingstone caused a sensation. The final few words of this quotation became famous. The arrival of Stanley at that time gave the old man fresh encouragement. He had been very ill with fever for a long time and had almost given up hope. Before long he was off with Stanley on a trip into the northern part of Tanganyika.

Map Work

Stanley became a famous explorer in his own right, although he lacked the Christian principles that motivated Livingstone. On one of his other expeditions he circumnavigated **Lake Victoria**, travelled down the **Lualaba River**, to where it merged with the **Congo** and followed it down to the sea. Can you trace this journey on a map in an atlas? Stanley eventually returned to Britain and went on to receive a knighthood and to become an MP.²

Something to do outdoors

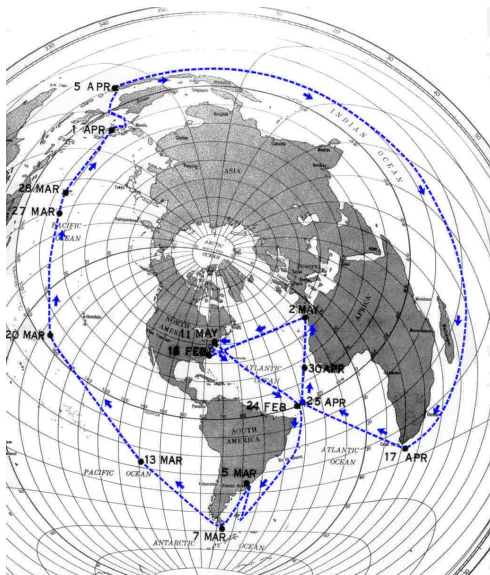
Stanley and Livingstone were explorers. They went to places where people from Europe and America had seldom, if ever, been before. They made records of what they saw so that other people could know more of what the world was like. People still enjoy reading stories and reports written

¹ See the lesson for November 16th.

² Adapted from Owen, Evan, *What Happened Today?* Book 2 available on the *Mothers' Companion* flashdrive <https://motherscompanion.weebly.com>

by people who have travelled to parts of the earth far from their own home. Although you are not likely to be able to go anywhere that is as remote as the places visited by Stanley you can still do some exploring. Get out a map of your own locality. Study it carefully. Looking at places that are within walking (cycling, scooting etc.) distance; are there places you have never been to? Plan an expedition. Don't forget to make notes and sketches and write all about it when you come back!

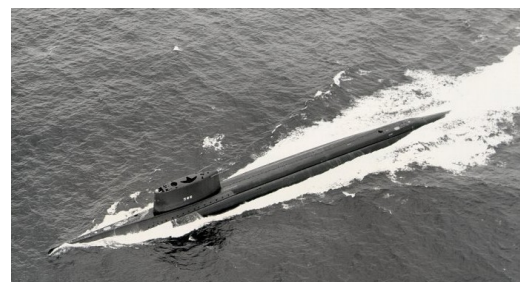
Another journey



If you have been doing these lessons for a while you may have already come across some lessons about circumnavigating the earth. Joshua Slocum alone in his sailing boat,³ and Captain Cook⁴ for instance. A very unusual first circumnavigation came to an end on **10th May** 1961. Captain Beach of the US navy arrived with his crew off the coast of Rehoboth Beach, Delaware. They had circled the earth underwater in a nuclear submarine, the *USS Trident*. You can see the route they took on the left. They made the entire trip without surfacing, although they used the periscope,⁵ of course. Even when a crew member became ill and needed to be sent for medical attention, the submarine did not surface. Can you see a strange zigzag in their route along the coast of South America? The *USS Trident* came near in shore at this point and then transferred the sick man to a US navy surface vessel via the periscope hatch!

The whole journey, code named “Operation Sandblast” was carried out in great secrecy. Even the crew did not know what they were going to do until the submarine was well on its way. The reason for this was that one of the purposes of the trip was to find out whether the submarine could make this trip totally undetected. The *Trident* succeeded in this and no one knew where she had been until after the journey had been completed.

The *Trident* was a nuclear powered submarine. Nuclear submarines have nuclear reactors on board. Atoms in the nuclear reactor split, which releases energy as heat. This heat is used to create high-pressure steam. The steam turns propulsion turbines that provide the power to turn the propeller. The Americans knew that the Russians had powerful nuclear submarines too. The Russians had been the first to put a satellite into orbit. Their Sputnik beat the American Telstar into space. This fuelled American desire to be the first to circumnavigate the globe under water. Because the *Trident* was nuclear powered she did not need to take on fuel and could make the long voyage without any support.



The first person to sail round the world (on the surface, of course) was the Portuguese navigator Ferdinand Magellan who completed his

³ July 1st

⁴ July 7th

⁵ See Lesson for March 25th for instructions on making your own periscope.

voyage in 1522. The route selected for the *Trident* was deliberately chosen to follow that of Magellan. Above you can see a plaque commemorating the *Trident's* voyage. It was designed on board by one of the crew during the voyage. The words round the edge, *Ave Nobilis Dux Iterum Factum Est*, refer to Magellan. They mean, "Hail, Noble Captain, It Is Done Again."

Something to make: A submarine toy

You will need:

A bendy plastic straw

Plasticine

A large plastic pop bottle full of water

Take the straw and bend it at the flexible bend. Cut both ends of the straw together so that you have about a couple of centimetres either side of the bend. Now take a small blob of plasticine and push the open ends of the bent-over straw into it, so sealing the ends.

Test your submarine in a little water in a bowl. It should float just below the surface. If it sinks too low, remove some of the plasticine. If some of the straw sticks up, add some more plasticine.

Now put your submarine into the bottle of water. It should float just under the surface. Put the lid on the bottle and tighten it to seal it. Now gently but firmly squeeze the bottle with your hands. What happens to your submarine? What happens when you let go again?

When you squeeze the bottle this increases the pressure. This squashes the air inside the straw making it more dense so the submarine starts to sink. When you let go of the bottle, the air inside the straw spreads back out, making it less dense, and so your submarine rises back up to the surface.