

20th May

Memory Verse

What manner of man is this, that **even the winds and the sea obey him!** Matthew 8:27

Something to read

More “winds and sea” related items today!

On **20th May** 1514 Vice Admiral Sir Thomas Spert (or Pert) (d.1541) was appointed the first Master of Trinity House, the organisation formed for “the express purpose of dealing with the well-being and betterment of the mariner.” Spert had been master of Henry VIII's ship the *Mary Rose* and later of the *Henry Grace a Dieu* the largest English ship of its time so he must certainly have known something about the needs of mariners.



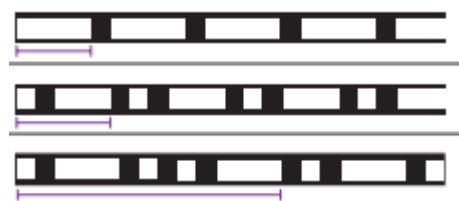
Trinity House still operates today and since the time of James I one of its tasks has been erecting, looking after and running lighthouses – surely one of the most important things one can imagine for the “well-being of the mariner”. There are sixty lighthouses around the coast today and all of them are now automatically operated. There was a time, however, when all lighthouses had to be manned. That means that someone had to live in the light-house and attend to the light.¹

The lighthouse-keeper's job was lonely and sometimes dangerous. The exciting story of Grace Darling, the light-house keeper's daughter is in the Optional Resources file for today. Do you have a lighthouse near you?² Nowhere in Britain is more than 70 miles from the sea so you might be surprised to find where your nearest lighthouse is – it could be nearer than you think. I cannot see a lighthouse from my home but there is a beauty spot not far away where on a clear evening you can *just* see the light from St Tudwal's Lighthouse – 1 white and red flash every 15 seconds.

Activity with torch(es)

Light-house lights “flash” in a variety of patterns which mariners can use to identify which light-house they are seeing. The patterns are classified as:

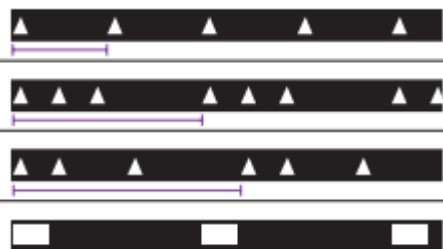
Occulting: total duration of light longer than total duration of darkness. There are three possible variations within this type (see right) called **single** occulting, **group** occulting and **composite** group occulting.



Isophase: duration of light and darkness equal:



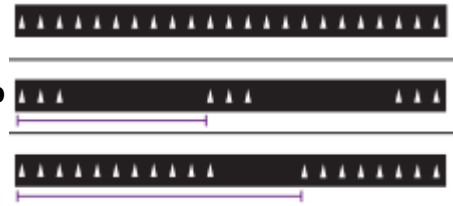
Flashing: total duration of light shorter than total duration of darkness. This group subdivides into **single** flashing, **group** flashing, **composite** group flashing and **long** flashing.



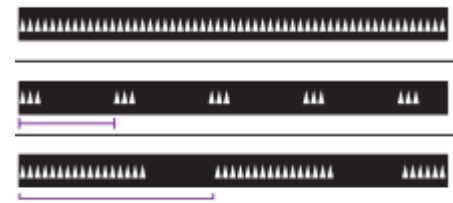
¹ You can watch an old film of the Eddystone lighthouse crew changing over here: <https://www.youtube.com/watch?v=wfvDJHBw7yA>

² <https://www.countryfile.com/go-outdoors/days-out/britains-top-landmark-lighthouses>

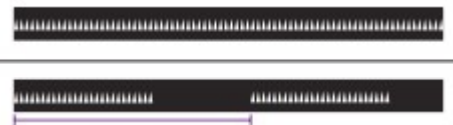
Quick: repetition rate of 50-79 usually either 50 or 60 flashes per minute. This group subdivides into **continuous** quick, **group** quick and **interrupted** quick.



Very Quick: repetition rate of 80-159 usually either 100 or 120 flashes per minute. This group subdivides into **continuous** very quick, **group** very quick and **interrupted** very quick.



Ultra Quick: repetition rate of 160 or more usually 240 to 300 flashes per minute. This group subdivides into **continuous** ultra quick and **interrupted** ultra quick.



Some lighthouses, like St Tudwals, incorporate colour in the pattern but I have not included these in the list above.

With the aid of a torch you could try to replicate some of these patterns, although the Very Quick and Ultra Quick might be too difficult! If you can darken a room, so much the better. A number of children together could take turns in flashing while the others guess the pattern.³

A poem to read

In today's Optional Resources files is a poem that tells the story of the Pirate Ralph the Rover – in the days well before Trinity House!⁴ You can read the poem aloud. Remember what you learned about reading poems aloud in the lesson on the Armada on Monday. There are some questions that older children can answer on paper in the Optional Resources file too. If you began a poetry memorisation programme on 5th January (if not look at that lesson and begin one now) you could include it.

One of the most famous of our lighthouses is that on the Eddystone Rock near Plymouth. The first lighthouse to be built in this dangerous place was Henry Winstanley's, tower completed in 1698. It did not withstand the terrible battering from wind and waves however and in 1703 it was destroyed in a storm. The replacement lighthouse was destroyed by a fire in 1709.

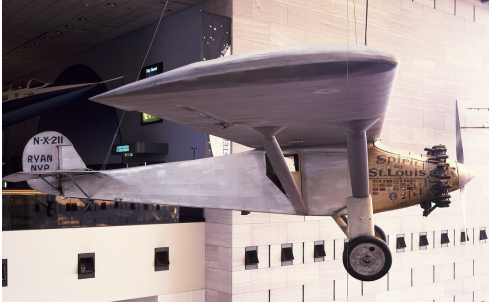
The next Eddystone lighthouse was designed by John Smeaton (1724 – 1792) who is sometimes called “the father of civil engineering”. He based his design on the shape and structure of an oak tree and it was so strong and sturdy that it withstood the weather until 1877 when it was partially demolished and a new lighthouse built. It was only *partially* demolished because it proved impossible to move the strong original foundations! Today you can visit the light house as it has been re-erected in Plymouth for visitors to see.

³ For information about the inventor of the flashing light lighthouse see the lesson for August 17th.

⁴ In fact the equivalent institution for Scotland, the Northern Lighthouse Board, was not established until the eighteenth century. See the lesson for 17th August for more information.

Smeaton recognised the source of his inspiration was God's own handiwork. A verse from Psalm 127 is carved round the ceiling of one of the upper storerooms. Look at the Psalm and see if you can guess which verse he chose.⁵

Map Work



An exciting journey across the ocean took place in 1927. Read the story below and work out how far it was – but watch out, the route may not be what you expect!

In the early morning of Friday, **May 20**, 1927, A young American airmail service pilot took off from Roosevelt Field, Long Island. His name was Charles “Slim” Lindbergh and he was attempting to win the prize offered for the first solo non stop crossing of the Atlantic from the New York to Paris. Lindbergh was not a famous pilot and he had found it hard to get the financial backing he needed for his attempt. A number of pilots had already lost their lives trying to meet this challenge and Lindbergh was carefully prepared. His monoplane, *Spirit of St Louis*, was loaded with enough fuel for the trip and the fuel had been strained over and over again so he could be sure it contained nothing that could block the plane's fuel line and cause the engine to stop in mid flight. He was in the air for 33½ hours (after a tricky take-off on a muddy field) and he flew sometimes over storm clouds and sometimes just over the tops of the waves. Fog hampered him too, making navigation difficult and a build up of ice caused him to lose height but despite it all he landed at Le Bourget Aerodrome, Paris at 10:22 p.m. on Saturday, May 21.

Lindbergh took a Great Circle or Geodesic route rather than flying directly east over the Atlantic Ocean. This is because what looks like the shortest route on a flat map is not in fact shortest. To visualise the shortest route you need to look at a three dimensional globe.⁶. In fact Lindbergh's flight path was not a simple curve at all.⁷

5 More details about the lighthouse, including some of Smeaton's original drawings can be found here: <https://creation.com/eddystone-lighthouse>

6 There is a good article explaining this here: <https://gisgeography.com/great-circle-geodesic-line-shortest-flight-path>

7 You can see it here <https://pioneersofflight.si.edu/content/route-lindbergh%E2%80%99s-transatlantic-flight>.