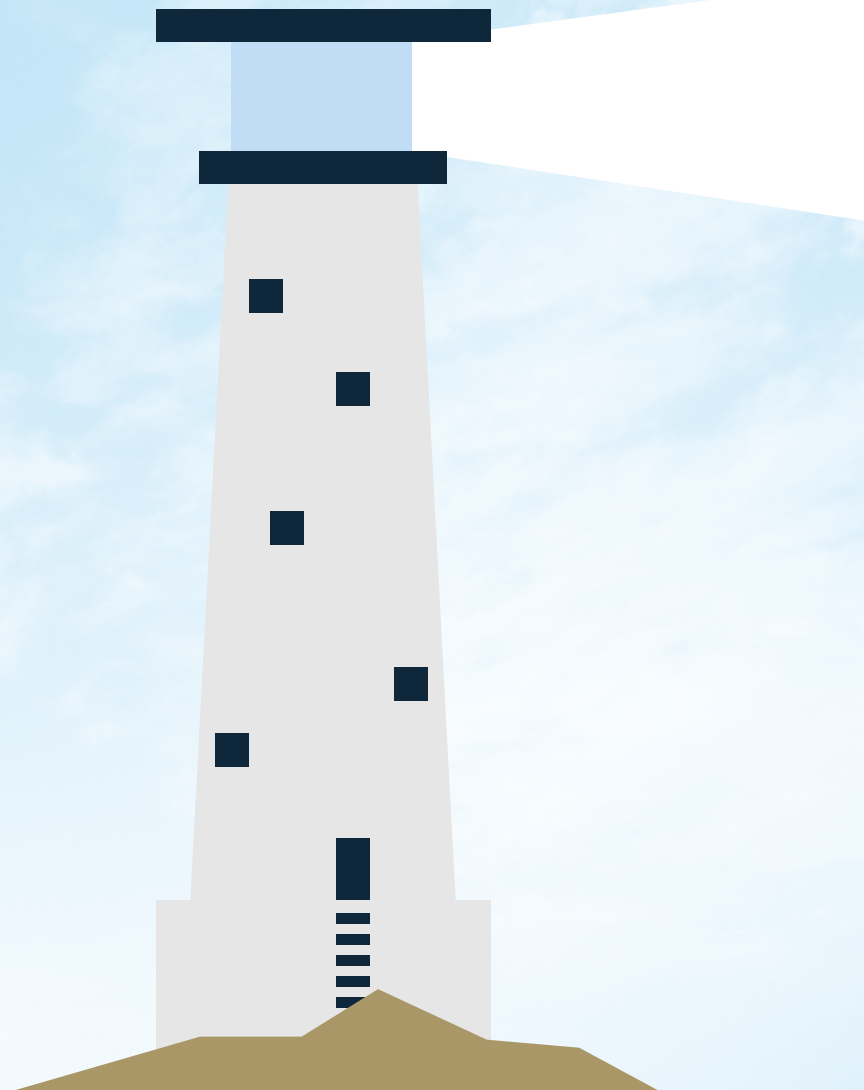




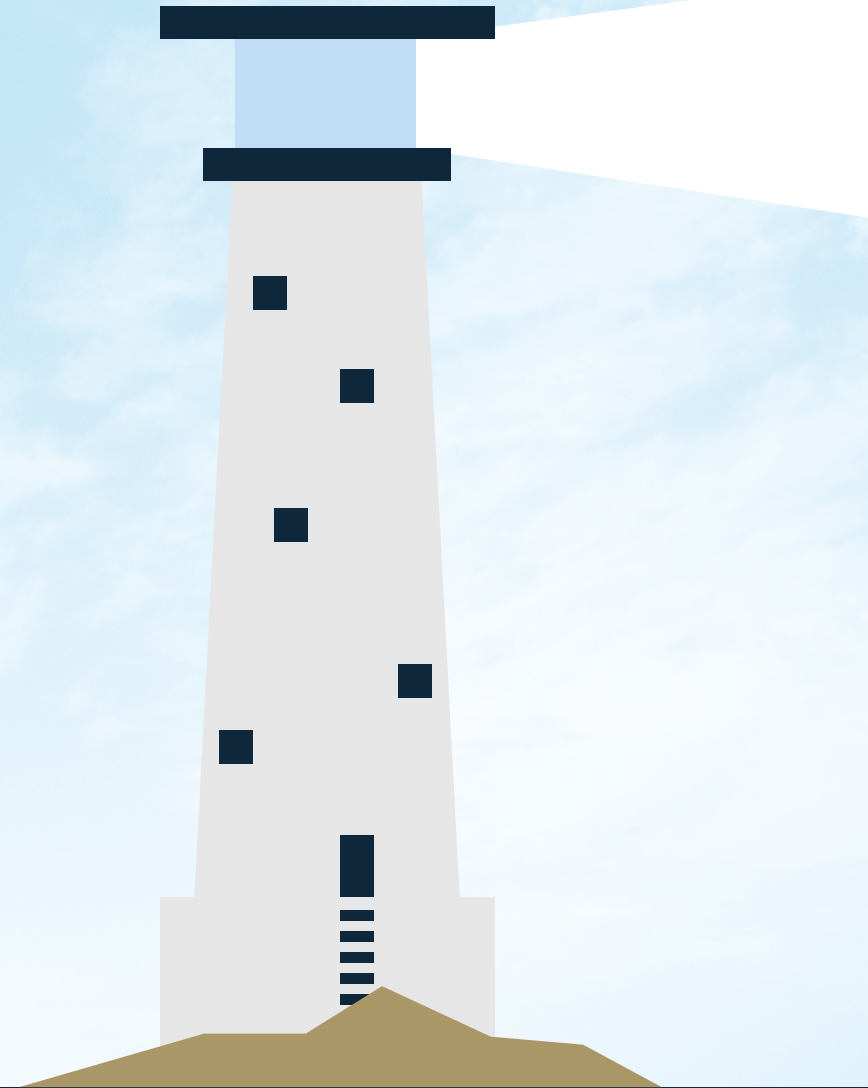
TRINITY HOUSE

Safety at sea



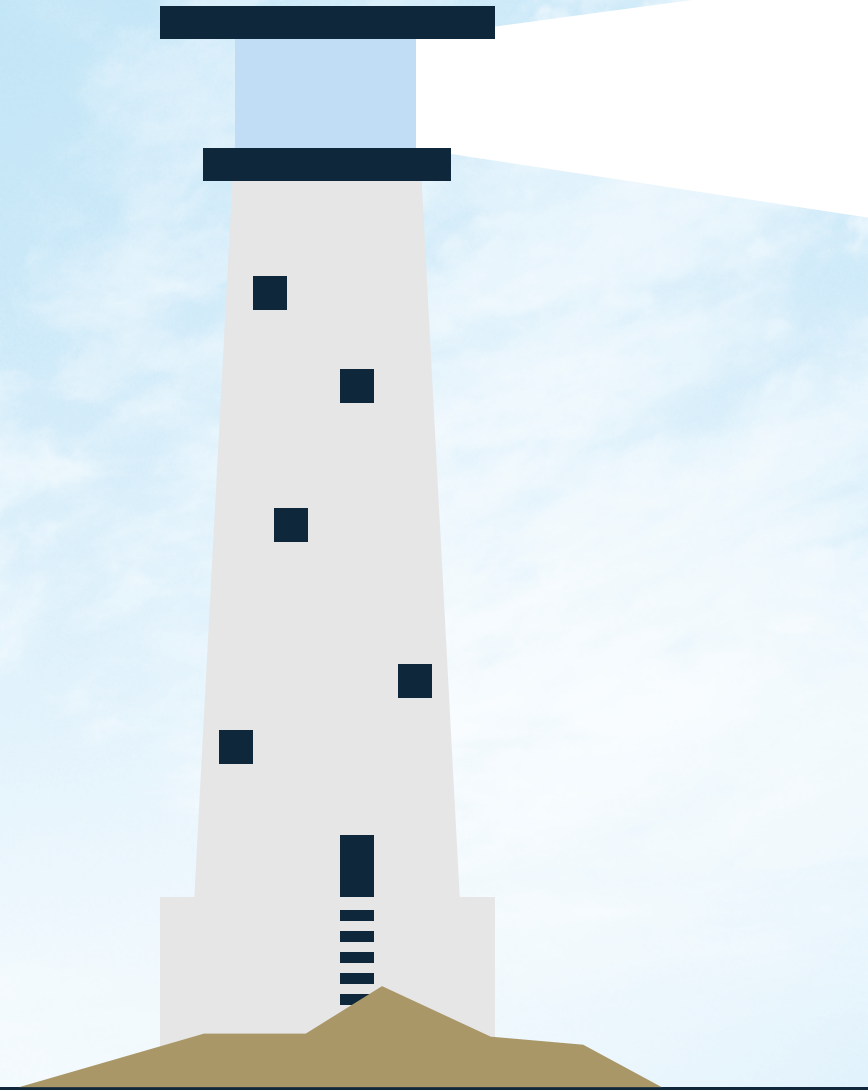
Starter →

Activity 1 →



Starter

What am I?



What am I?

I am usually painted in
a visually distinctive colour

I communicate visually
with seafarers

I am anchored to the seabed but
part of me floats on the surface

I help mark out potential hazards
and safe channels for ships

I am a buoy!



What is a buoy?



A buoy is a highly visual object that floats in water and is used in the middle of the sea to locate or warn passing ships. Buoys are generally bright in colour to aid their visibility.

Their different colours, shapes and designs are part of a visual language that tell seafarers about different safety messages, such as nearby hazards, safe routes and more.

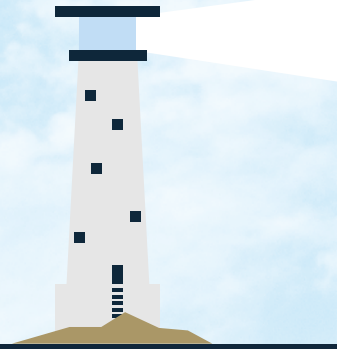
The role of Trinity House



Trinity House is a charity that keeps ships and seafarers safe when they travel in our waters.

It does this by providing aids to navigation to help seafarers guide their vessel to safety.

Our aids to navigation



Quick fire quiz



How many buoys does Trinity House
have in its estate?

Quick fire quiz



What is the name of the organisation that provides recommendations and guidelines for buoys?

Quick fire quiz



What does the video name as one of the world's busiest waterways?

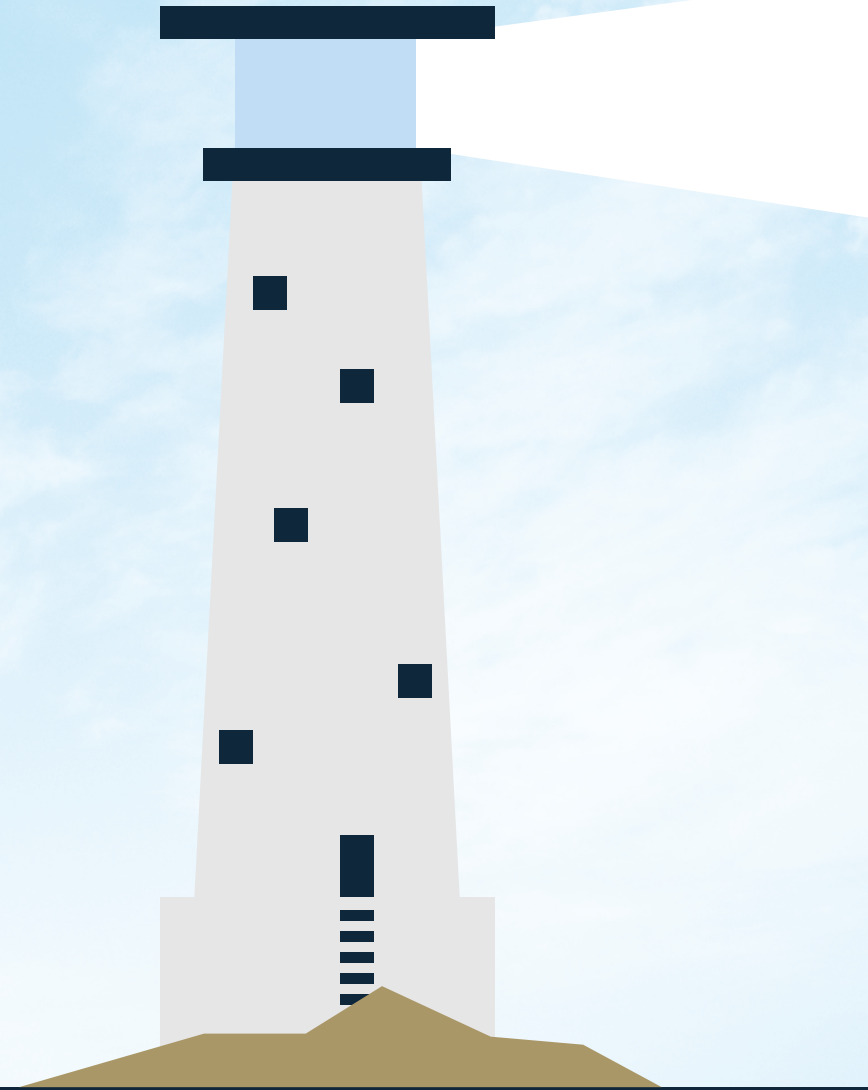
Quick fire quiz



What colour are the light vessels
deployed by Trinity House?

Activity 1

Exploring buoys



Buoys



Buoys can be distinguished from each other by:

- the colour of their light and flashing sequence;
- the colour and combination of colours on the buoy;
- the shape of the topmark.

These markings are used to aid navigation providers all over the world, and the buoy design can assist seafarers according to their marking needs.

Buoys



‘Lateral’ marks indicate the ‘port’ and ‘starboard’ hand sides to be followed. They are coloured red (port) and green (starboard); they are used generally to mark the sides of well-defined navigable channels.

Buoys



‘Cardinal’ marks are black and yellow, used in conjunction with the points of the compass; seafarers will be safe if they pass north of a north mark, south of a south mark, east of an east mark and west of a west mark. Cardinal marks can mark wrecks or hazards, or draw attention to bends, junctions or the end of a shoal.

Buoys



There are also design configurations for **'isolated danger'** marks, **'safe water'** marks, **'special'** marks and **Emergency Wreck Marking** buoys.

Emergency wreck marking buoys



Trinity House has a duty to mark and, if appropriate, remove wrecks which are a danger to ships and seafarers navigating in that area.

Once the wreck is located, it is surveyed using seabed scanning equipment to determine whether it is a danger to other vessels. If so, the wreck will be marked with buoys to warn ships of the danger while arrangements are made for the wreck to be removed.

Emergency wreck marking buoys



On Saturday 14 December 2002, a car carrier (called *Tricolor*) and a container vessel (called *Kariba*) collided when both vessels were about to enter a popular shipping route through the English Channel. The container vessel struck the car carrier. *Tricolor* quickly took on water, capsized and sank.

Two days later a cargo vessel (called *Nicola*) struck the wreck of the car carrier. Tugs pulled the cargo ship from the wreck on the same day.

Emergency wreck marking buoys



On Wednesday, 1 January 2003, the wreck of the car carrier, *Tricolor*, was struck for a third time when a tanker carrying 77,000 tons of gas oil hit the wreck.

These wrecks in the Dover Strait brought into focus the effective responses required to quickly mark new dangers and prevent collisions.

One solution was the new design of a lightweight, easily portable and highly visual marker buoy: the Emergency Wreck Marking Buoy.

Emergency wreck marking buoys



The Emergency Wreck Marking Buoy is designed to provide high visual and radio aid to navigation recognition. It is placed as close to the wreck as possible, or in a pattern around the wreck. The Emergency Wreck Marking Buoy is kept in position until:

- The wreck is well known and has been broadcast in maritime publications
- The wreck has been fully checked and exact details such as position and depth above the wreck are known
- A permanent form of marking of the wreck has been carried out

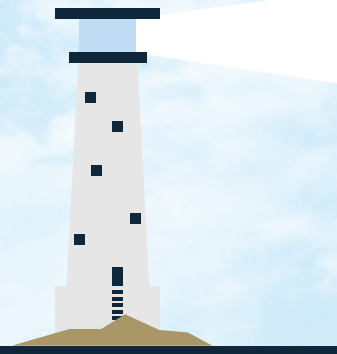
Emergency wreck marking buoys



The buoy has the following characteristics:

- A pillar or spar buoy, which contains a tall structure on a broad base, where the size is dependent on location
- Coloured in equal number and dimensions of blue and yellow vertical stripes, fitted with an alternating blue and yellow flashing light with a range of 4 nautical miles
- The top mark is to be a standing/upright yellow cross

Design brief



You are now going to design
a new type of buoy to mark dangers
in the water, to be used and recognised
by seafarers around the world.