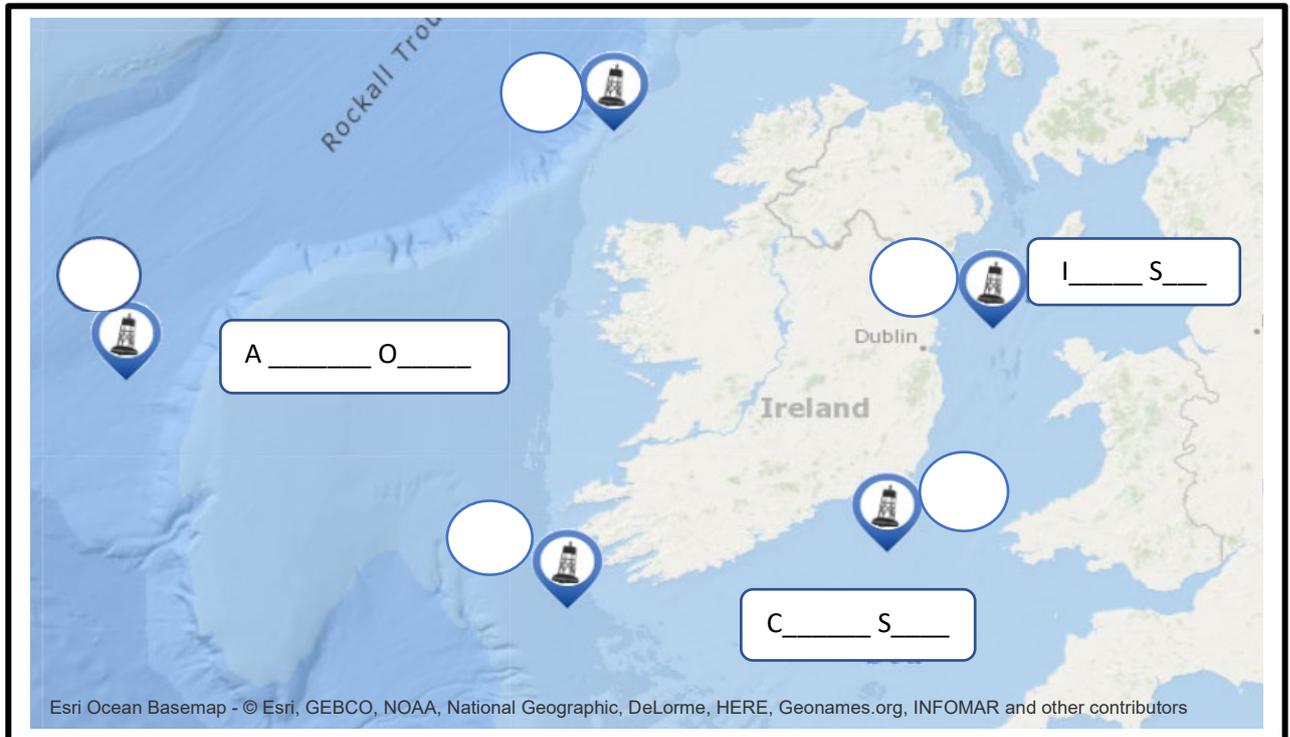


Buoy oh Buoy! Monitoring our Weather Worksheet



The **IRISH WEATHER BUOY NETWORK** has five weather buoys located around Ireland named: M2, M3, M4, M5, M6. They are used to help provide weather **FORECASTS** as well as **SAFETY** information for those that work at sea.



Map of Ireland showing the Irish Data Buoy network

1. Look at the map above and fill in the boxes with the name of the ocean and seas that surround Ireland.
2. Search for a map of the **Irish Weather Buoy Network** on the web. Fill in the location points on the map above (e.g. round circles), with the name of each of the weather buoys (M2, M3, M4, M5 and M6).
3. Using the web, search and find the position of the five **Irish Weather Buoy's coordinates**. Fill in the missing longitude and latitude co-ordinates below:

Weather Buoys	Longitude and Latitude Co-ordinates
M2	53.4800°N _____
M3	_____ 10.5500°W
M4	54.9982°N _____
M5	51.6900°N _____
M6	_____ 15.88135°W

Remember: Longitude positions are described as being north (North) or South (S) and Latitude positions are describes as east (E) or West (W) of the prime meridian.

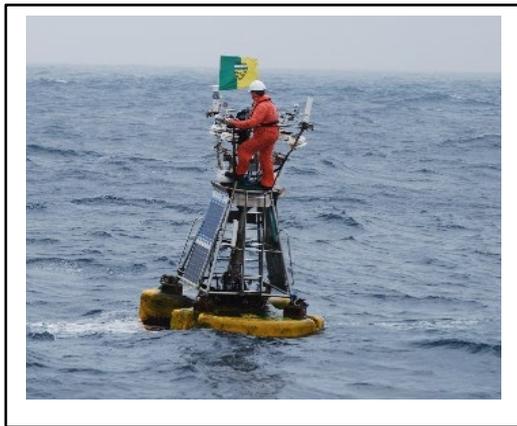
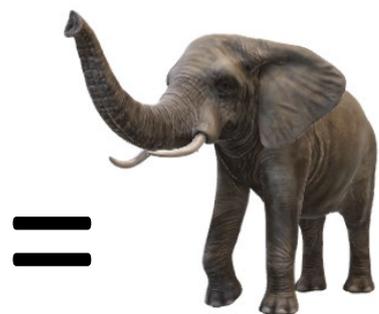


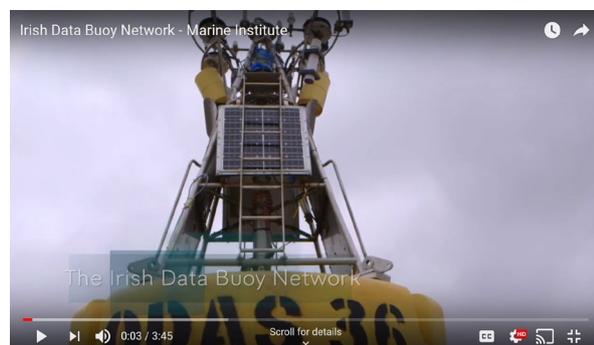
Image of the M4 weather buoy at sea, courtesy of the Marine Institute

Did you know that the Irish Weather Buoys moored in the Atlantic Ocean each weigh approximately 5-6 tonne. This is about the same weight as a large African elephant.



Watch the footage about the Irish Data Buoy Network and answer the questions below (the footage is approx. 4 min long).

<https://www.youtube.com/watch?v=9A7MLZ6yQW4>



5. Name the Irish Meteorological Service that uses the Irish data buoys network?

6. What equipment is used in space to transmit real-time data from the weather buoys? _____

7. How often is the data transmitted in real-time?

- a. hourly b. daily c. weekly

8. Who else might use the weather buoy network to find out about the weather and conditions of the sea for safety?

- a. MARINERS such as fishermen, sailors and shipping companies
 b. EMERGENCY agencies such as Search and Rescue and the Navy
 c. MARINE SCIENTISTS, such as oceanographers and climate change researchers
 d. All of the above

9. Marine scientists collect data to measure the wave height and conditions, as well the salinity and temperature of the water at various depths of the ocean. This is used to help understand long term climatic work.

- a. TRUE b) FALSE

10. Which of the following is **NOT** measured by equipment on the data buoys?

- a. windspeed direction
 b. the amount of plastic in the Atlantic Ocean
 c. atmospheric pressure and air temperatures.