





Introduction

Overview

This lesson introduces pupils to the vital role the Met Office played in D-Day. It includes codebreaking activities and explores the importance of weather observations and forecasts in decision-making.





Time required

60 minutes for all activities (or less if individual tasks are selected)



Materials required

- Decoding D-Day slides
- Cipher wheels
- 'Top Secret' worksheet
- Printed map(s) (optional)

Learning outcomes

By completing this lesson, students will be able to:

- Reflect on the importance of weather observations and forecasts in decision making
- Understand why coding, or encrypting, information is important

Curriculum Links

- History/ People, Past Events and Societies understand how people's lives have shaped this nation
- English literacy and language written and verbal communication
- Geography/Social studies/The World Around Us observation, data collection and communicating data and prediction
- Computing/ICT coding and encryption

Activity steps





01

Start the lesson with a discussion about the weather during war.

- Why might taking weather observations and making weather forecasts be important during war (in particular, for this example, during World War II)?
- How do they think weather observations might have been communicated during war?
- Who was responsible for making the weather forecasts?
- Introduce the concept of coding, or encrypting, information so that it's protected – only those who know how to decode it can use it

Using the supporting slides, discuss with the class that they are going to be looking at some secret weather observations that were coded and decoded for D-Day during World War II.

The people taking the measurements of the weather, the observers, would code their observations using a cipher, and then send the encrypted observations to Bletchley Park – the top-secret home of the World War II codebreakers.

The observations would have been sent to Met Office HQ from Bletchley Park, and then been de-coded by a special machine called a teleprinter. The draughtswomen would then transcribe these weather observations onto a chart which would then be passed to the forecasters, including Group Captain James Stagg.



Activity steps





Give each student a 'Top Secret' worksheet and the secret cipher wheel (give a wheel to each child, or one per pair or small group – you could get them to cut out their own cipher wheel or you could do this in advance for them).

First, get them to experiment with the wheel. Show them how to rotate it round, that each icon represents a different letter of the alphabet. Get them to work out what their first name is in code and draw this on their 'Top Secret' worksheet.

Remind the children that they will be doing this the other way around when they have to de-code weather information for Captain Stagg.

Show them that they have received some coded observations from the Met Office that were used for forecasting D-day. These were sent out at 7am on June 6 1944 and are on their 'Top Secret' worksheet.

Pupils should decode each picture clue using their cipher wheel, and write down the corresponding letter in the box below, to decode the weather observation for each location.

If there is time, they can create their own coded forecast for today's weather at their own location and draw the icons in the boxes. They can then give their sheet to the person sitting next to them, and see if they can decode their observation, and then compare what they recorded to see if they think the weather is the same.





Activity steps

04

Go through the observations that they have decoded and discuss as a class what the weather was doing at 7am on D-Day. You could either use your interactive white board to write the observations on the map on slide 8, or print out a copy/copies of the map and ask the students to write the observations down, perhaps also using the kind of weather symbols they might see used on a weather forecast today, as well as words.

If time, ask the students to come up to the front of the class and present a weather forecast, with support, using the observations that the children have deciphered. This can be done on the background of the weather map.



Bring the session to a close by asking the class the following questions:

- Why is taking weather observations and making weather forecasts important during war?
- Why were weather observations secret during World War II? How were they made secret?
- Do you think the Met Office does similar things today? (for more information, see https://www.metoffice. gov.uk/services/government/defence-andsecurity/mmu)





The Met Office provides free education content to support young people aged 7-14 to be prepared for the effects of weather and climate change on them and their communities. Find out more at **www.metoffice.gov.uk/schools**

© Crown Copyright 2021, Met Office 01739