



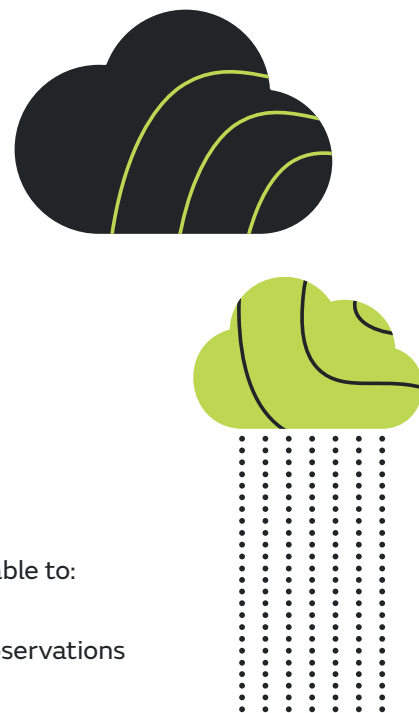
Decoding D-Day



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

- Supporting Met Office D-Day slides
- **Met Office D-Day film**
- Encoded weather observations from D-Day, 7am
- Decoder Key
- 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

To begin the lesson, introduce the topic of the weather during war to your class. Using the following questions, prompt a discussion, perhaps recording the students' answers on a whiteboard/flipchart. An alternative would be to discuss these questions in pairs or small groups using the internet for research, and then report back to the group.

- 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 taken and communicated during war and who would have been responsible for this?
- If it's not already been mentioned, introduce the concept of coding, or encrypting, information so that it's protected – only those who know how to decode it can use it. Discuss why some information is encrypted and explore whether they think it would be useful to encrypt weather data during war?

You could also mention that before the war very few women were involved in meteorology, but during the war, women played a vital role – including taking observations and encoding/decoding them. Women continue to be meteorologists today.



15 minutes



Slides 1-5

Activity steps



02

Discuss with the class that they are going to be looking at some secret weather observations that were coded for D-Day during World War II using a machine called a teleprinter.

Using the slides and the Met Office film for inspiration, introduce how 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.

03

Give each student (or group of students) a 'Decoder Key' and the encoded weather observations. Ask them to decode – like the teleprinter – the weather observations for six of the sites that were sent through in secret to the Met Office on the morning of D-Day and write their answers on their worksheet.

Tip: Each letter of the alphabet on the 'Decoder Key' is represented with a series of dots. At the top of the strip is the word 'HELLO' – if you look at the dots next to each letter of this word, and then compare them to the list of letters below, you can see how the key works.



10 minutes



Slide 6



D-Day film



Individual task

or



Groupwork



20 minutes



Individual task

or



Groupwork

Activity steps

Sites to decode: Manchester, Aberdeen, Aberporth, London, Portland and Aldergrove.

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, stand in front of the map, and present a weather forecast, with support, using the observations that the students have deciphered.

05

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 we do similar things today?
(for more information, see <https://www.metoffice.gov.uk/services/government/defence-and-security/mmu>)



10 minutes



Groupwork



5 minutes