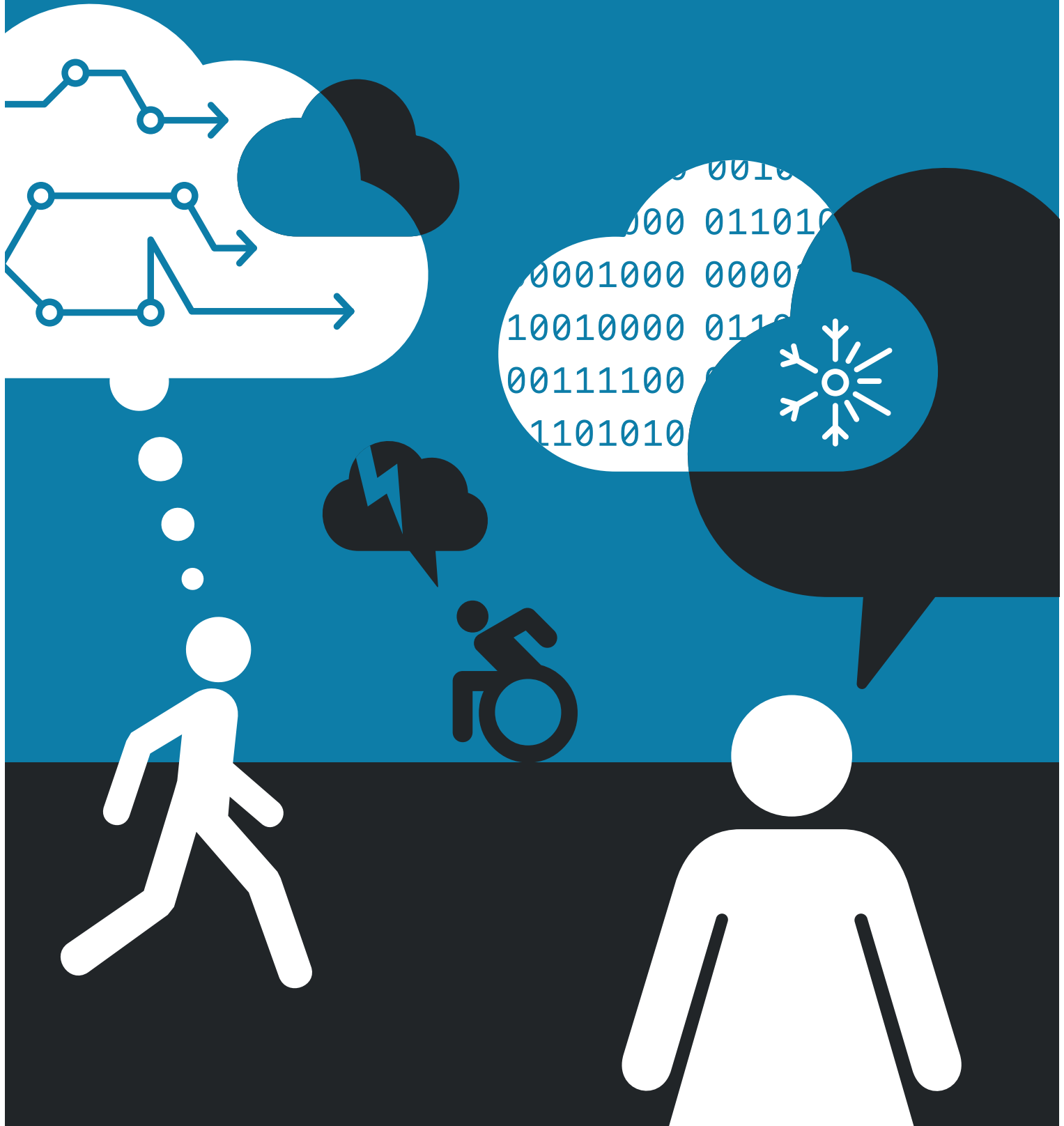




Weather warriors



Introduction

Overview

This lesson brings together community, collaboration and social action by getting students to understand how weather and climate information can support and benefit their local area. It also includes examples of organisations which work to keep communities safe from the impacts of severe weather



Time required

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



Materials required

- Weather warriors slides
- Weather warriors film
- Action plan template (available on page 6)
- Pens and paper
- Access to the internet (for online research)

Learning objectives

This lesson will enable students to:

- Reflect on how weather and climate change affect us personally and as a community
- Develop risk assessment strategies and skills that will help keep themselves, and others safe
- Gain an understanding of how mathematical skills are used and applied in the real world of weather and climate

Curriculum links

- **Mathematics and numeracy** – understanding how a wide range of mathematical skills are deployed in the study of weather via graphs, percentages, averages
- **Science/sciences and technology** – evidence, evaluation, reporting and managing risk)
- **PSHE and citizenship/PSE/health and Wellbeing/PDMU** – explaining choices, careers and the world of work, skills for life, contributing to improvements in the community
- **Geography/social studies/the world around us** – understanding environments and the climate; and how human activity relies on the effective functioning of natural systems
- **Computing/ICT** – creative projects using multiple digital tools to achieve challenging goals

Activity steps



01

Use the supporting slides and weather warriors film to introduce the class to different types of severe weather events in the UK and their impact on local communities.

Tip: You may also want to use an example of a local severe weather event, perhaps something that the students may have seen on local news/heard about to add extra relevance.

Working with the person next to them, ask the class to write down the impacts these types of severe weather events might pose.

02

Split the class into small groups, give them a tablet or other mobile device and allocate each a type of severe weather from the slide.

Ask the groups to research and write a case study from a real-world past weather event which matches the severe weather type they have been allocated. E.g. If they have been allocated flood, students should create a case study of a real-world flood event.

Groups can use case study materials found **here** to identify a case study matching their severe weather type and begin their research. They will use this case study later to support an action plan for a similar event in the future.



5 minutes



Groupwork



Slides 2 – 3



Weather warriors film



20 minutes



Groupwork



Slides 3 – 4

Activity steps

Use the following prompts to guide what the students' research should include:

- Overview of the event and issues caused
- How were individuals and communities impacted? Who was most at risk? Why?
- Drawing on statistics found in their research, what were the impacts of the weather event?
- Were there incidents involving injuries, illness, hospitalisation? Was there risk of disruption to energy infrastructure or transport?
- Methods used to mitigate risk including weather information and warnings (and consequential behavioural change)
- How did emergency services respond?
- What causes events like this to occur and how likely is it to happen again in the future?
- Conclusions on what was done well and what could have been improved in terms of how to prepare, manage and mitigate risks related to similar events in the future

03

Give each group an action plan template (found on page 6) and who can help profiles (found on page 7). Set the groups a challenge to create a plan for a local community that was affected by the event in their case study. This should help plan and prepare themselves and their communities for a similar event in the future.

Explain that the main aim of this plan will be to identify some of the risks associated with a severe weather event, identify areas for improvement and help mitigate risks to the community in the future.



15 minutes



Groupwork



Who can help? profiles



Action plan template

Activity steps

04 Invite each group to present their action plans – this can be done in a variety of formats including a slide show, written report or role play. To add a competitive element, ask teams to vote for their favourite presentations. The group(s) receiving the most votes can then present to their year group in an assembly or to members of the SLT.

Tip: Alternatively, if you have links with community representatives from local organisations, you may like to invite them to take part in the voting/judging and give the class a mini presentation to support their understanding and heighten their engagement. Asking community representatives from local organisations to come in and visit/present also provides the opportunity to ask about volunteering opportunities for the students in their local community to help foster their interest and extend their learning.

05 Close the lesson by asking the class to identify the key outcomes they have learnt during the activity by using the following prompt questions as a guide:

- Why is weather information important for communities?
- What is a risk assessment and why is it important?
- Why are mathematical skills important for careers involving weather and climate?

As a final reflective task, ask each student to write down one pledge on how they will help their local community to address and prepare for severe weather events.



15 minutes



Groupwork



5 minutes



Individual task

Action plan template

Location your action plan is for:

Type of severe weather:

Main risks of the severe weather:

Ideas for how to reduce the impact of the severe weather:

Different people in the local community would be affected by the severe weather, how and why:

Timeline which plots what action would need to be taken at which times and the jobs involved in supporting the community:

Who can help?

Flood protection agencies

Experts at the Environment Agency, SEPA, Natural Resources Wales and NI Direct, alongside other agencies, help to manage the risk of flooding



Coastguard

In stormy conditions and where there is a risk of coastal flooding, the coastguard team work to keep people safe on land and at sea



Emergency medical services

Ambulance and hospital staff work around the clock to treat people ill or injured as a result of severe weather conditions e.g. heatstroke



Fire service

Firefighters support communities in severe weather by helping people stay safe during flooding and help protect homes against floodwater



Police

The police help communicate safety information about severe weather events. They also work to keep roads clear and search for missing persons

