Earthlearningidea

Flood through the window - what would you see, how would you feel? Pupils picture for themselves what a major flood through the window might look like

If a major flood hit the view you can see from the window what would you see?

- Water flows downhill, so which direction would the flood flow from?
- · Which areas would be under water?
- Where would the faster flow be and where the slower flow?
- What colour would the water be?
- · What might the water be carrying?
- How might the flood affect the local public services like roads, electricity, phones, etc?



A flood in Laplae, Uttaradit Thailand, 2006.

Public domain photos by Krittaya.





The Otava river in flood in 2002, Písek district, Czech Republic.

Jenik.
Published
under GNU
Free
Documentation
license.

What else would you sense?

- What would you hear?
- · What might you smell?
- · How would you be feeling?

What would you do?

· What might the emergency services do?

What should the local people do before the next flood to protect themselves and their houses and belongings?

Before flood - in Death Valley



Death Valley National Park: a National Park Service sign warns of flash floods over a vast area.

Draxfelton, Public domain image

After flood - in New Orleans



New Orleans after Hurricane Katrina: the flood damaged West End neighborhood, Bellaire Street, near the 17th Street Canal levee breech. Flood waters flung around automobiles, knocked a house off its foundation and moved it half a block away.

Photo by Infrogmation. GNU Free Documentation license

The back up

Title: Flood through the window - what would you see, how would you feel?

Subtitle: Pupils picture for themselves what a major flood through the window might look like

Topic: Using your window as a teaching aid – what could a flood outside be like?

Age range of pupils: 8 - 18 years

Time needed to complete activity: 15 - 30 mins

Pupil learning outcomes: Pupils can:

- describe and explain the likely effects of a major flood affecting the view through the window:
- determine the best course of action in those circumstances:
- describe measures that could be taken to minimise damage from a future flood.

Context: Pupils are asked to visualise a flood seen through the window and imagine its likely impacts now and in the future. Sudden flooding episodes can even affect areas with steep slopes, but are much more common in flat, low-lying areas subject to major weather phenomena.

- Water flows downhill, so which direction would the flood flow from? Pupils should be able to judge the effects of any slopes seen.
- Which areas would be under water? *The lower areas*.
- Where would the faster flow be and where the slower flow? Faster flow on the steeper slopes and where water is channelled by natural features or buildings.
- What colour would the water be? Judge from the photos. It is often dirty brown because of all the mud it carries.
- What might the water be carrying? As well as sediment, it carries floating objects. Major floods can carry cars, people, animals, trees and even houses.
- How might the flood affect the local public services like roads, electricity, phones, etc?
 Many would be disrupted – the larger the flood the greater the disruption. Water supplies might be a particular problem as they are often polluted by sewage.

- What would you hear? You might hear the sound of flowing water or of panicking people.
- What might you smell? Most floods provide little smell during the flood – the aftermath can be very smelly though, as sewage may be part of the sediment laid down.
- How would you be feeling? This depends on the scale of the flood and the security of you, the viewer.

What would you do?

• What might the emergency services do? Before the flood they may have tried to build flood barriers and warn people to evacuate; during the flood they may rescue people by helicopter or boat. After the flood, cellars may need pumping out and, in major floods, health risks may have to be dealt with.

What should the local people do before the next flood to protect themselves and their houses and belongings?

Try to ensure that houses in areas likely to flood are as protected as possible by siting electrical points above flood level, etc. valuable belongings should be stored upstairs if possible. Sandbags might be stored to build local flood barriers.

Following up the activity:

Try some of the other Earthlearningidea 'through the window' activities.

Underlying principles:

- Most areas can be affected by floods in certain circumstances.
- Flooding can have devastating effects both during and after the flood.

Thinking skill development:

Pupils have to translate their experiences into a new 'through the window' situation – a bridging activity.

Resource list:

a window and good imagination

Useful links:

Flood information for UK residents - http://www.environment-agency.gov.uk/subjects/flood/US information on flood safety - http://www.srh.nooa.gov/lmrfc/education/safety/shtml

Source

Chris King of the Earthlearningidea Team.

♥ Earthlearningidea team. The Earthlearningidea team seeks to produce a teaching idea every week, at minimal cost, with minimal resources, for teacher educators and teachers of Earth science through school-level geography or science, with an online discussion around every idea in order to develop a global support network. 'Earthlearningidea' has little funding and is produced largely by voluntary effort.

Copyright is waived for original material contained in this activity if it is required for use within the laboratory or classroom. Copyright material contained herein from other publishers rests with them. Any organisation wishing to use this material should contact the Earthlearningidea team.

Every effort has been made to locate and contact copyright holders of materials included in this activity in order to obtain their permission. Please contact us if, however, you believe your copyright is being infringed: we welcome any information that will help us to update our records.

If you have any difficulty with the readability of these documents, please contact the Earthlearningidea team for further help. Contact the Earthlearningidea team at: info@earthlearningidea.com

Earthlearningidea