

## Lesson 1: Why did Mr's McCormack's business disappear down the river?

Students will learn:

- about a topical environmental issue (floods);
- about the connections between human activities and flooding;
- about the connections between human activities and flooding;
- use their imagination to consider other people's experiences;
- to analyse written information;
- to make links between cause and effect;
- to think about taking responsibility for our actions;
- to develop enquiry skills.

### Starter

1. Start this lesson with some high impact images of flooding to engage the students.

It could be a short video-clip, a power-point presentation, or a set of photos.

A range of images of Boscastle from the BBC website are included with this activity. If you are using a local or current example, there are generally images available from this source.

2. Ask students what the images show.

What has or may happen to objects and people in the image.

What caused the events portrayed in the image?

3. Pose the question: "Are floods an act of God?" explaining that this is not to be taken literally but to mean that floods are unavoidable/uncontrollable acts of nature.

Students then have 5 minutes to write their responses, which are then sealed in an envelope and handed in.

4. Explain the rationale of the unit.

*"Using the example of floods we are going to consider how the behaviour of individuals and groups of people impacts on the environment, and consider how changes to this behaviour could affect the future of our environment."*

This is extremely important as students need to have an appreciation of the bigger picture from the outset if the enquiry is to be effective! The reason that they have handed in sealed responses is because this is the key question that they will be tackling over the next 4 lessons, at the end of which they will be asked to unseal their envelopes and consider changes that may or may not have occurred to their viewpoints.

## Main activity

1. Photocopy Resource Sheet 1 for the class.
2. Cut out the statements and put each set into an envelope.
3. Divide the class into pairs or small groups and then hand out the envelopes.
4. Students then need to use the statements from the envelope to solve the mystery.  
Mrs McCormack is a fictional character and the statements refer to a fictional flood, individual teachers should adapt the statements to suit the flood event they are using.

There is no right or wrong answer. What the teacher should look for is the quality of synthesis of information; what is the implication of each statement and how does it help to solve the mystery? Success depends on co-operative group work in which productive learning and social relationships are fostered.

NB: Further questions beyond that of the central question can be created to extend the activity.

For further guidance on mysteries refer to Leat, D. (1998) Thinking Through Geography. Chris Kington Publishing.

## Plenary:

1. Photocopy Resource Sheet 2 for the class.
2. Show students a copy of Resource Sheet 2.  
This implies that floods are naturally occurring events that without human interaction are not disastrous. Only when floods and humans interact will a disaster occur. Using information from Lesson 1, suggest what has brought people into contact with floods and how their behaviour accentuated the risk of flood disasters. This could be finished as a homework task with students annotating their own copies of Resource Sheet 2.

## Lesson 2 – How can we protect ourselves?

Students will learn:

- about flood protection and prevention strategies;
- about different points of view on flood management;
- to develop empathy for others;
- to assess different viewpoints;
- to detect bias;
- to develop strategies for tackling conflict;
- to develop a willingness;
- to develop empathy for others;
- to assess different viewpoints;
- to detect bias;
- to develop strategies for tackling conflict;
- to develop a willingness to participate in group and class discussion;
- to present a reasoned case and justify opinions;
- to negotiate responsibly;
- to develop enquiry skills.

### Starter

1. Ask students to make a list of ways of protecting places from flooding.  
Hopefully this will include hard-engineering as well as sustainable solutions.
2. Ask them if they had to choose one means of protection for their own homes what would it be?  
Give the class 5 minutes to discuss this in small groups and try to come to an agreement.  
This is designed to give students an insight into the difficulties of reaching agreement with others over a decision that could impact on them personally.

### Main activity

1. Copy Resource Sheets 3 and 4
2. Role-play based on the question 'How can we protect ourselves?'  
Students read through the issue of flood management as outlined on Resource Sheet 3, and consider each of the options proposed.  
Divided the class into groups of 4 and allocate each member a role from Resource sheet 4.  
Groups then decide which option for flood management should be chosen. Each role has a separate agenda so reaching a decision should be problematic.  
Each group then needs to feedback their decision to the class and briefly explain how it was reached, outlining particular stumbling blocks they encountered.

### Plenary

Write the following quote on the board: "You can't please all of the people all of the time, but you can please some of the people some of the time."

Ask students: How accurately this portrays their discussions today? How this could relate to the problem of flooding? What does this means for us as sensible citizens?

## Lesson 3 - Will flood prevention be approved?

Students will learn:

- about the interaction of value judgements and geographical evidence;
- to analyse a range of viewpoints;
- to develop empathy with others;
- to recognise and challenge biased opinions;
- to develop a sense of justice;
- to compromise;
- an awareness that our actions have consequences;
- to develop enquiry skills.

### Starter

1. Give students 5 minutes to write about something that they consider to be very important in their lives.
2. When the time is up the teacher needs to collect in all the paper and then blatantly when the students are all watching, tear it all up and throw it in the bin. This should provoke a reaction!
3. Ask students how they feel. Most will probably be angry or annoyed. Now explain that the reason you did this was to give them an understanding of the frustration that some must feel when their views are ignored, dismissed or discarded. Many people believe that their views about floods are not being heard or listened to!

### Main activity

1. Copy Resource Sheet 5.
2. Explain to students that reaching a decision on flood management, as they did last lesson, is not the end of the decision-making process. Proposals have to go before local, county, regional and national councils and committees, and need to be approved at each stage. This process can be long, tedious and very frustrating for those involved, particularly if the local community is in disagreement. You will be able to draw on a multitude of examples!

Consider the decision reached last lesson to work out just how problematic it would be to push our proposal through.

3. Divide students into small groups. Give each group a copy of Resource Sheet 5 and asked to read carefully through the viewpoints outlined. They must decide which viewpoints are likely to agree/disagree with our flood management proposal. Students then need to consider why different views are going to make introducing our proposal more difficult. Finally, they need to consider how viewpoints could be altered and things about compromises that could be made.

### Plenary

Pose the question "will the flood prevention proposal be approved?" Take a show of hands from the room; then ask how long they think the process of full approval will take? Provide them with examples of schemes that have been introduced locally, nationally or internationally - from the Narmada Dam Project to the Lynmouth flood alleviation scheme - and outline associated approval problems such as conflicts of interest, and give a time scale for the introduction of the schemes.

## Lesson 4 - Is flooding set to continue?

Students will learn:

- to reflect on what they have learnt and communicate their findings;
- to justify their personal opinions;
- about the concept of sustainability;
- how thinking about the future can guide decision-making;
- to develop a belief that things can get better and that individuals can make a difference.

### Starter

Students open the envelope from the first lesson and to consider their responses to the question "Are floods an act of God?" In groups students need to spend 5 minutes discussing how their views may or may not have altered over the last few lessons. This is an important stepping stone into the main activity.

### Main activity

Working in small groups students are to prepare a short presentation entitled "Possible Futures." They need to consider the flood scenario that the teacher has drawn upon in the previous lessons, and use the knowledge and understanding they have developed during the unit to imagine how the issue of floods, aligned to a specific area or nationally or globally, will develop over the next 10-20 years.

Will severe floods become more common?

Will people continue to put themselves at risk from floods?

Will humans continue to battle against nature?

Will there be a more sustainable future?

Teachers may want to provide students with outline maps of particular river basins, these could be annotated to identify and locate the events of students "Possible Futures."

When completed a spokesperson from each group needs to display and present their "Possible Futures" to the rest of the class.

### Plenary

This needs to be a summary and evaluation of the unit and ought to focus around the following questions:

- Why is flooding society's responsibility?
- Can the conflicting views of different people/groups of people be resolved?
- Is there one best solution to flooding?
- What limits society's ability to make the "right" decisions about flood management?

## **Taking it that important step further.....**

Beyond the 4 lessons, where practically possible, it is important that students "do something" with what they have learnt. Effective school citizenship only takes place when students share their learning with audiences beyond the classroom; this can be within the school, their local, national or global communities.

For example:

- Write articles for the school or local newspaper relating to their "Possible Futures."
- Prepare a flood prevention display for the school building or local council office.
- Write letters making recommendations to MPs, local councillors or the European Parliament.
- Use video link to discuss/debate your concerns about flooding with other local schools or perhaps go global and hold a forum with schools overseas (there are plenty of schools in Mississippi who are keen to make contact with UK schools).