



Description: Analysing various drainage basin patterns and identifying areas of high flood risk.

Drainage basins

QCA Geography Schemes of Work reference: Year 7 Unit 4: Flood disaster – how do people cope? National Curriculum Geography reference: QCA ICT Schemes of Work reference: Unit 1: Using ICT Unit 2: Information and presentation Unit 3: Processing text and images

Learning Objectives: Pupils should be taught how to delineate a drainage basin, recognise differences and identify areas of high flood risk.

Suggested activities:

Introduction: Using activity sheet 7a1 define what a drainage basin is and their key features.

Main: Describe the technique for estimating the size of a drainage basin (see worksheet 7a2) and then allow pupils to complete worksheets 7a3 and 7a4. From worksheet 7a5 discuss with the children the areas that are likely to be at greatest risk from flooding. As drainage basins can stretch over hundreds of kilometres and it can take several days from the initial heavy rainfall period for river levels to rise, what type of warning system could you position in the drainage basin to forewarn of flood dangers. Discuss what you would monitor, where and how you would get this information to the agencies that provide a warning service.

Resources:

Maps

Worksheets http://www.learn.co.uk/default.asp?WCI=SubUnit&WCU=17234 drainage basin labelling exercise

Learning outcomes:

- Identification of the key features of a drainage basin
- That understanding of drainage basins can help to identify areas at risk from flooding
- That monitoring drainage basin levels can help flood forecasting
- Using ICT to find information

Extension activities:

Discover if there is a relationship between the size of a drainage basin and discharge levels for a selection of drainage basins of differing size throughout the world.