AS GEOGRAPHY

PYHSICAL: Rivers, Floods and Management

What Board do we study?

AQA
www.aqa.org.uk
This website contains useful information on the course content and practice papers and mar schemes. Type 'Geography' into course search finder, scroll down to A Level Geography (2030), click on this. Scroll down to 'Specification', click on 'Past papers and mark schemes'. Check which Unit you want to look at and click on the relevant past papers to open them.

What are Rivers, Floods and Management?

This unit involves looking at the drainage basin as a whole and how rivers work as a critical part of this. You will study landforms associated with river processes. You will examine both human and physical causes of flooding and consider impacts and responses to flood events.

Practicalities – What do I need? What should I read?

Paper and a file with dividers (getting organised now will avoid wasting time during revision)
Lots of common sense
Pens, ruler and pencils

Books:
Smith J. & Knill R. AQA AS Geography, Nelson Thornes
Barker R. Redfern D. Skinner M. AQA AS Geography, Phillip Allen
Parsons R. AS-Level Geography Exam board AQA Complete revision and practice, CGP
Barker R. Redfern D. Skinner M. AQA AS Geography Student Unit Guide, unit 1: Physical and Human Geography, Phillip Allen
Websites:
http://coolgeography.co.uk/
http://www.metoffice.gov.uk/
http://www.environment-agency.gov.uk/
http://www.geography.org.uk/resources/flooding/
http://playgen.com/play/floodsim/

See below for what you need to know

What do I need to know?

RAG rate the following throughout, or at the end of the Unit.

Rivers, Floods and Management	R	A	G
Unit content			
Drainage basin hydrological cycle			
Water balance			
Factors affecting storm discharge			
Storm hydrograph			
Long profile – changing processes of erosion, transportation & deposition			
Hjulstrom curve – types of load			
Long profile - Changing cross profile downstream			
Graded profile - Potential and kinetic energy			
Changing channel characteristics – cross profile, wetted perimeter, hydraulic radius, efficiency, roughness, velocity & discharge			
Erosional fluvial landforms – waterfalls, rapids, potholes			
Erosional/depositional landforms - meanders			
Depositional landforms – levees, deltas, braiding, floodplains			
Rejuvenation - knick points, waterfalls, incised meanders, river terraces			
Physical causes flooding			
Human causes flooding			
Magnitude, frequency risk analysis			
2 recent case studies of flooding MEDC & LEDC including causes, impacts and response			
Flood management strategies – hard engineering e.g. dams, river straightening, levees, diversion spillways			
Soft engineering – forecast and warning, land use management, wetland and river bank restoration			
Unit skills			
ICT skills			
Map skills (are you confident using 6 figure grid references? Can you interpret maps)			
Interpreting data and trends (graphs, tables, percentages)			
Literacy skills (do you understand question command words?)			
High quality evaluation skills (balanced arguments and your own opinions)			