Topic 1: Hazardous Earth		
How does the world's climate system function, why does it change and how can this be hazardous for people?	The global atmospheric circulation and how circulation cells and ocean currents transfer and redistribute heat energy around the Earth.	Choose an item.
	How global atmospheric circulation determines the location of arid (high pressure) and high rainfall (low pressure) areas	Choose an item.
	The natural causes of climate change and how they explain past climate change events: asteroid collisions, orbital changes, volcanic activity, variations in solar output.	Choose an item.
	Evidence for natural climate change (ice cores, tree rings,historical sources) and how it is used to reconstruct glacial and interglacial climate during the Quaternary and UK climate since Roman times to the present day.	Choose an item.
	How human activities (industry, transport, energy, farming) produce greenhouse gases (carbon dioxide, methane) that cause the enhanced greenhouse effect leading to global warming.	Choose an item.
	Evidence for how human activity is causing climate change (sea level rise and warming oceans, global temperature rise, declining Arctic ice, increased extreme weather events) and the possible consequences on people.	Choose an item.
	The range of projections for global temperature change and sea level rise in the future, including physical process and human reasons for uncertainty about those projections.	Choose an item.
	Use and interpretation of climate graphs	Choose an item.
	Use and interpretation of line graphs/bar charts showing climate change	Choose an item.
	Use and interpretation of temperature and sea-level projection graphs to 2100.	Choose an item.
How are extreme weather events increasingly hazardous for people?	Characteristics (pressure, rotation, structure) and seasonal global distribution of tropical cyclones (hurricanes and typhoons) including source areas and tracks and how these change over time.	Choose an item.
	How the global circulation of the atmosphere leads to tropical cyclones in source areas, reasons why some tropical cyclones intensify and their dissipation	Choose an item.
	Physical hazards of tropical cyclones (high winds, intense rainfall, storm surges, coastal flooding, landslides) and their impact on people and environments.	Choose an item.
	Why some countries are more vulnerable (physically, socially and economically) than others to the impacts of tropical cyclones	Choose an item.
	How countries can prepare for, and respond to, tropical cyclones: weather forecasting, satellite technology, warning and evacuation strategies, storm-surge defences.	Choose an item.
	The effectiveness of these methods of preparation and response in one developed country and in one developing or emerging country	Choose an item.
	Use of GIS to track the movement of tropical cyclones	Choose an item.

	Use of weather and storm-surge data to calculate Saffir-Simpson magnitude	Choose an item.
	Use of social media sources, satellite images and socio-economic data to assess impact	Choose an item.
Why do the causes and impacts of tectonic activity and management of tectonic hazards vary with location?	Earth's layered structure (including the asthenosphere), with different composition and physical properties (temperature, density, composition, physical state)	Choose an item.
	How the core's internal heat source (through radioactive decay) generates convection, the key foundation for plate motion	Choose an item.
	Distribution and characteristics of the three plate boundary types (conservative, convergent and divergent) and hotspots.	Choose an item.
	Causes of contrasting volcanic (volcano type, magma type/lava flows and explosivity) and earthquake hazards, including tsunami (shallow/deep, magnitude)	Choose an item.
	Primary and secondary impacts of earthquakes or volcanoes on property and people in a developed and emerging or developing country .	Choose an item.
	Management of volcanic or earthquake hazards, in a developed and emerging or developing country including short-term relief (shelter and supplies) and long-term planning (trained and funded emergency services), preparation (warning and evacuation; building design) and prediction	Choose an item.
	Interpret a cross-section of the Earth	Choose an item.
	Use and interpretation of world map showing distribution of plate boundaries and plates	Choose an item.
	Use of Richter Scale to compare magnitude of earthquake events	Choose an item.
	Use of social media sources, satellite images and socio-economic data to assess impact	Choose an item.