GEOGRAPHY GCSE AQA 9-1
PAPER 1, SECTION 1A
THE CHALLENGE OF NATURAL HAZARDS
LEARNING CHECKLIST

CHESTERTON
COMMUNITY COLLEGE

NATURAL HAZARDS AND TECTONIC HAZARDS

KEY IDEA 1: Natural hazards pose major risks to people and property.	
1. Definition of a natural hazard	CGP 2, OUP 8, CUP 9
2. Types of natural hazard	CGP 2, OUP 8, CUP 9
3. Factors affecting hazard risk	CGP 2, OUP 9, CUP 9,19

KEY IDEA 2: Earthquakes and volcanic eruptions are the result of physical processes	
1. Plate tectonics theory	CGP 3, OUP 10, CUP 10-11
2. Global distribution of earthquakes and volcanic eruptions and their relationship to plate margins	CGP 4, OUP 10-11, CUP 14,20
3. Physical processes taking place at different types of plate margin that lead to earthquakes and volcanic activity	CGP 3, OUP 12-13, CUP 12-13
(a) constructive	CGP 3, OUP 12, CUP 12-13
(b) destructive	CGP 3, OUP 13, CUP 12
(c) conservative	CGP 3, OUP 13, CUP 13

KEY IDEA 3: The effects of, and responses to, a tectonic hazard vary between areas of contrasting levels of wealth	
1. Effects of a tectonic hazard	CGP 5-6, OUP 14-15, CUP 16,22-23
(a) primary effects	CGP 5-6, OUP 14-15, CUP 14,22-23,26-27
(b) secondary effects	CGP 5-6, OIP 14-15, CUP 14,22-23,26-27
2. Responses to a tectonic hazard	CGP 5-6, OUP 16-17, CUP 15,27
(a) immediate	CGP 5-6, OUP 16-17, CUP 15,27
(b) long-term	CGP 5-6, OUP 16-17, CUP 15,27
3. Use named examples to show how the effects and response to a tectonic hazard vary between two areas of contrasting levels of wealth	CGP 7, OUP 14- 17, CUP 26-27,28-29
(a) LIC example:	CGP 7, OUP 14-17, CUP 28-29
(b) HIC example:	CGP 7, OUP 14-17, CUP 26-27
(c) Difference in effects	CGP 7, OUP 15, CUP 29
(c) Difference in responses	CGP 7, OUP 16-17, CUP 29

KEY IDEA 4: Management can reduce the effects of a tectonic hazard	
1. Reasons why people continue to live in areas at risk from a tectonic hazard	CGP 8, OUP 18-19, CUP 18
(a) geothermal energy	OUP 19, CUP 18
(b) tourism	CUP 18
(c) minerals	
(d) fertile soils	CUP 18
2. How can the risks from a tectonic hazard be reduced?	CGP 8, OUP 20-21, CUP 18-19

(a) monitoring	CGP 8, OUP 20, CUP 18
(b) prediction	CGP 8, OUP 20, CUP 18,30-31
(c) protection	CGP 8, OUP 21,24-25
(d) planning	CGP 8, OUP 21, CUP 18-19,24-25

WEATHER HAZARDS

KEY IDEA 1: Global atmospheric circulation helps to determine patterns of weather and climate	
1. General atmospheric circulation model: pressure belts and surface winds	CGP 11, OUP 22, CUP 34-35
(a) pressure belts	CGP 11, OUP 22, CUP 34-35
(b) surface winds	CGP 11, OUP 22, CUP 34-35

KEY IDEA 2: Tropical storms (hurricanes, cyclones, typhoons) develop as a result of particular physical conditions	
1. Global distribution of tropical storms	CGP 12, OUP 24, CUP 36
(a) hurricanes	OUP 24, CUP 36
(b) cyclones	OUP 24 , CUP 36
(c) typhoons	OUP 24, CUP 36
2. An understanding of the relationship between tropical storms and general atmospheric circulation	OUP 24, CUP 36
3. Causes of tropical storms and the sequence of their formation and development	CGP 12-13, OUP 25, CUP 36-37
4. The structure and features of a tropical storm	CGP 13, OUP 26, CUP 37
(a) cloud pattern	CGP 13, OUP 26, CUP 37

(b) eye-wall	CGP 13, OUP 26,37
(c) eye	CGP 13, OUP 26, CUP 37
(d) movement	CGP 13, CUP 37
(e) anticlockwise spin	CGP 13, CUP 37
(f) wind pattern	CGP 13, OUP 26, CUP 37
(g) rainfall	CGP 13, OUP 26, CUP 37
(h) eye pile	
(i) storm surge	
5. How climate change might affect tropical storms	CGP 13, OUP 26-27, CUP 38
(a) distribution	CGP 13, OUP 27, CUP 38
(b) frequency	CGP 13, OUP 27, CUP 38
(c) intensity	CGP 13, OUP 27, CUP 38-39

KEY IDEA 3: Tropical storms have significant effects on people and the environment	
1. Effects of tropical storms	CGP 14, OUP 28, CUP 40
(a) primary effects	CGP 14, OUP 28, CUP 40
(b) secondary effects	CGP 14, OUP 28, CUP 40
2. Responses to tropical storms	CGP 14, OUP 29, CUP 41
(a) immediate responses	CGP 14, OUP 29, CUP 41
(b) long-term responses	CGP 14, OUP 29, CUP 41
3. Use a named example of a tropical storms to show:	CGP 15, OUP 28-29, CUP 44-45
(a) effects of the tropical storm	CGP 15, OUP 28, CUP 44-45

(b) responses to the tropical storm	CGP 15, OUP 29, CUP 44
4. How can the effects of tropical storms be reduced?	CGP 15, OUP 30-31, CUP 42-43
(a) monitoring	CGP 15, OUP 30, CUP 42
(b) prediction	CGP 15, OUP 30, CUP 42
(c) protection	CGP 15, OUP 30, CUP 42
(d) planning	CGP 15, OUP 31, CUP 42-43

KEY IDEA 4: The UK is affected by a number of weather hazards	
1. An overview of types of weather hazard experienced in the UK	CGP 16, OUP 32-33, CUP 46-49
(a) Rain	CGP 16, OUP 32, CUP 46-47
(b) Snow and ice	CGP 16, OUP 32, CUP 47-48
(c) Hailstorms	CGP 16, CUP 47
(d) Drought	CGP 16, OUP 32, CUP 47
(e) Wind	CGP 16, OUP 33, CUP 46-47
(f) Thunderstorms	CGP 16, OUP 32, CUP 47
(g) Heatwaves	CGP 16, OUP 32, CUP 48

KEY IDEA 5: Extreme weather events in the UK have impacts on human activity	
1. An example of a recent extreme weather event in the UK to illustrate:	CGP 17, OUP 34-35, CUP 52-53
(a) causes	CGP 17, OUP 34, CUP 52
(b) social impacts	CGP 17, OUP 34, CUP 52
(c) economic impacts	CGP 17, OUP 34, CUP 52

(d) environmental impacts	CGP 17, OUP 34, CUP 52
(e) how management strategies can reduce risk	CGP 17, OUP 35, CUP 49,52
(f) planning	CGP 17, OUP 35, CUP 49,52-53
2. Evidence that weather is becoming more extreme in the UK	CGP 16, OUP 38-39, CUP 50-51

CLIMATE CHANGE

KEY IDEA 1: Climate change is the result of natural and human factors, and has a range of effects	
1. Evidence for climate change from the beginning of the Quaternary period to the present day	CGP 20, 21, OUP 40-41, CUP 54-55
(a) glacials and interglacials	CGP 20, OUP 40, CUP 54
(b) ice and sediment cores	CGP 21, OUP 41, CUP 54
(c) temperature records	CGP 21, OUP 41, CUP 55
(d) pollen analysis	CGP 21
(e) tree rings	CGP 21, CUP 54
(f) shrinking glaciers	OUP 41, CUP 55
(g) rising sea levels	OUP 41
2. Possible causes of climate change – natural factors	CGP 22, OUP 42-43, CUP 56
(a) orbital changes	CGP 22, OUP 42, CUP 56
(b) volcanic activity	CGP 22, OUP 43, CUP 56
(c) solar output	CGP 22, OUP 42-43, CUP 56
3. Possible causes of climate change – human factors	CGP 22, OUP 44-45, CUP 56-57
(a) use of fossil fuels	CGP 22, OUP 44, CUP 56

(b) agriculture	CGP 22, OUP 45, CUP 57
(c) deforestation	CGP 22, OUP 45, CUP 57
4. Overview of the effects of climate change	CGP 23, OUP 40-41, CUP 58
(a) effects on people	CGP 23, OUP 40-41, CUP 58
(b) effects on the environment	CGP 23, OUP 40-41, CUP 58

KEY IDEA 2: Managing climate change involves both mitigation and adaptation	
1. Definitions	CGP 24, OUP 46-49, CUP 58
(a) mitigation	CGP 24, OUP 46, CUP 58
(b) adaptation	CGP 24, OUP 48, CUP 58
1. Mitigation	CGP 24, OUP 46-47, CUP 58-59
(a) alternative energy production	CGP 24, OUP 46, CUP 59
(b) carbon capture	CGP 24, OUP 46, CUP 58
(c) planting trees	CGP 24, OUP 47, CUP 58
(d) international agreements	CGP 24, OUP 47, CUP 58
2. Adaptation	CGP 24, OUP 48-49, CUP 59
(a) change in agricultural systems	CGP 24, OUP 48, CUP 59
(b) managing water supply	CGP 24, OUP 48-49, CUP 59
(c) reducing risk from rising sea levels	CGP 24, OUP 49, CUP 59