



Paper 1 – Unit 1 – Hazardous Earth Core Knowledge Booklet



HE1: Knowledge

Question	Correct answer
1. Name the four layers that make up earths structure.	Inner core, Outer core, Mantle Crust.
2. The layer with of the earths structure that is the thickest is...	Mantle
3. The layer which is the hottest is the...	Inner core
4. The layer which controls the earths magnetic field is...	Outer core
5. The layer which is thin, brittle and ridged is...	Crust
6. The two types of crust are...	Continental and oceanic
7. The type of crust which is made of granite is...	Continental
8. The type of crust which is thicker is...	Continental
9. The type of crust which is denser is...	Oceanic
10. The process that happens in the mantle and causes tectonic plate movement is...	Convection currents



HE2: Knowledge

Question	Correct answer
1. At divergent plate margins the plates move...	Apart – away from each other
2. Which type of crust subducts at a convergent plate margin...	Oceanic - denser
3. At conservative plate margins plates move...	Side by side
4. The type of volcano that forms at a divergent plate margin is...	Shield
5. The type of volcano that forms at a convergent plate margin is...	Composite
6. A volcano with a high gas content which is more explosive is...	Composite
7. A volcano which is flatter because of its runny lava is...	Shield
8. The point of friction underground where an earthquake originates from is called the...	Focus
9. The point on the surface of the ground where seismic waves originate is called the...	Epi-centre
10. A earthquake will be more powerful if the focus is...	Shallow

HE3: Knowledge

Question	Correct answer
1. Earthquakes magnitude is measured on the...	Richter Scale
2. A method of predicting volcanic eruptions is...	Tiltmeter
3. A method of planning for volcanic eruptions is...	Planned evacuation centres
4. A method of predicting an earthquake is...	Tracking plate movement
5. A method of planning for an earthquake is...	Having emergency services on call
6. In 2010 an earthquake hit the developing country of Haiti, and its magnitude was...	7.0 on the Richter scale
7. One primary effect was the number of deaths, and this was estimate to be...	316,000
8. Another primary effect was that the main port was destroyed in the capital city which is called...	Port-au-Prince
9. A secondary effect was that Cholera spread throughout the makeshift camps; this caused more deaths which was estimate to be...	8000
10. 180,000 homes were destroyed which made people...	Homeless

HE4: Knowledge

Question	Correct answer
1. Something that happens immediately when a hazard occurred is classified as a....	Primary effect
2. Something that happens in the weeks or months following a hazard is classified as a....	Secondary effect
3. A short-term response to the Haiti earthquake in 2010 was to provide aid for people. This was sent from...	The USA and Dominican Republic
4. The earthquake in Japan happened in 2011 and was a magnitude...	9.0 on the Richter scale
5. One primary effect was the number of deaths, and this was estimate to be...	16,000
6. The Tsunami caused a meltdown of a nuclear powerplant in...	Fukushima
7. A secondary effect was the cost of re-building, this was estimated to be...	\$235 billion
8. An immediate response was that the bullet train was fitted with a...	Automatic braking system
9. A long-term response was that the Tsunami barrier was rebuilt, it was rebuilt at a hight of...	12 metres
10. This was an issue because when the 9.0 magnitude earthquake hit in 2011 the Tsunami waves were...	15 metres

HE5: Knowledge

Question	Correct answer
1. Tree rings can show us what past climates were like from their...	Rings
2. The bigger the gap between tree rings...	The warmer and wetter the climate
3. Ice cores show us what past climates were like by testing the amount of...	Gas Bubbles (CO2)
4. The more gas found in year layer of an ice core the...	Warmer the climate
5. More modern evidence of climate change is temperature data and...	Sea Ice position
6. We started collecting accurate temperature data in the...	1860's
7. Climate includes the amount of precipitation and the...	Temperature
8. One factor that changes the climate of the world naturally is orbital change. This is when the suns rotation around the earth changes from circular to...	Oval (ellipses)
9. Another natural cause of climate change is sunspot. The more sunspots (solar flares) on the surface of the sun the...	Warmer the climate
10. Volcanic eruptions cool the earths climate as the ash cloud blocks....	Solar radiation

HE6: Knowledge

Question10	Correct answer
1. A human cause of climate change is burning fossil fuels. This releases...	Carbon dioxide
2. Humans also cut down trees. This is called...	Deforestation
3. This means that there are less trees to absorb...	Carbon dioxide
4. When humans add more greenhouse gasses to the atmosphere this causes the...	Human enhanced greenhouse effect
5. This makes the climate of the earth...	Warmer
6. If the earths temperature increases this will cause the ice caps to melt which will cause...	Rising Sea Levels
7. Global warming could also cause some area to become more arid leading to a lack of water causing...	Droughts
8. If the ice caps melt animals such as Polar bears will lose their...	Habitats
9. The Artic loses 13% of its sea ice every...	10 years
10. In the Maldives sea level rise means 80% of the country will be lost by...	2050



HE7: Knowledge

Question10	Correct answer
1. The main causes of sea level rise is thermal expansion and...	Eustatic sea level rise
2 . Where the coral turns white and can no longer photosynthesise is known as	Coral bleaching
3. During the 2023 heatwave in Europe, the number of people that died was ...	70,000 people
4. Climate change can cause animals to die on a large scale which is called ...	Extinction
5. High population growth is will cause the rate of climate change to ...	Speed up
6. This is because more people require more food, so agriculture will ...	Increase
7. If countries reduce the amount of fossil fuels used there will be less greenhouse gases in the ...	Atmosphere
8. this will cause the rate of climate change to ...	Slow down
9. Coal-fired power stations continue to be built in India and China will cause the rate of climate change to ...	Increase
10. If we increase the use of renewable energy the rate of climate change will	Slow down



HE8: Knowledge

Question10	Correct answer
1. Warm air rising creates...	Low pressure
2. As air rises it cools and condenses creating...	Clouds
3. In low pressure areas there will be...	High Rainfall
4. Low pressure happens in the Hadley cell on the...	Equator
5. High pressure is caused when air is...	Sinking
6. This leads to no clouds and therefore...	Low Rainfall
7. In high pressure areas there will be ...	Clear skies
8. High pressure areas happen in the Hadley cell on the...	Tropics of Cancer and Capricorn
9. The cell between the tropics and 60 degrees is called the ...	Ferrel cell
10. At the poles air is ...	Sinking



HE9: Knowledge

Question10	Correct answer
1.Hurricanes are form over the Atlantic from ...	June to November
2.Cyclones form between November to April in the	Indian Ocean
3.The tropical storm that form over the Pacific ocean from May to October is called a ...	Typhoons
4.Tropical storms only form when sea temperatures are 26.5 degrees and above at a depth of ...	60m
5.Tropical storms can only form between 5 and 30 degrees ...	North and south of the equator
6.Further north and south the water is	Too cold
7.Earth's rotation makes the cyclones spin which is called the ...	Coriolis effect
8.Tropical Cyclones move west due to ...	Easterly winds
9.Tropical storms get stronger over ...	Warm waters
10.Low pressure lifts the sea to create a ...	Storm surge



HE10: Knowledge

Question10	Correct answer
1.Tropical Cyclones are measured on the ...	Saffir Simpson scale.
2.Thick, dense clouds cause prolonged and intense ...	Rainfall
3.Another hazard from tropical cyclones is ...	Landslides
4.The potential to be harmed by natural hazards is known as ...	Vulnerability
5.An area with a higher physical vulnerability is often ...	Low lying coastal areas
6. An area with a higher social vulnerability is often ...	Areas of poverty
7. An area with a higher economic vulnerability is often ...	A developing nation
8. Elderly population are more vulnerable to the impacts due to not being able to ...	Evacuate
9. If a country is more developed it is more capable to make accurate weather predictions using ...	Tracking data
10. Areas of low relief will be at risk of ...	Storm surges



HE11: Knowledge

Question10	Correct answer
1. Cyclone Nargis hit Myanmar on ...	Friday 2nd May 2008
2.Cyclone Nargis was a category ...	Four
3. The percentage of rice paddies destroyed by cyclone Nargis was ...	65%
4.The number of people killed by cyclone Nargis was ...	140,000
5. The bodies lay in the streets for ...	9 days
6. Hurricane Katriana became category five over the ...	Gulf of Mexico
7.The percentage of people that were able to evacuate Hurricane Katrina was ...	80%
8.The number of people killed by Hurricane Katrina was ...	1,800
9. The ward that was most affected by Hurricane Katrina was ...	Lower 9th ward
10. The repair cost of Hurricane Katrina was over ...	\$150 billion



HE12: Knowledge

Question10	Correct answer
1.Any form of immediate action taken to save lives, prevent human suffering is known as ...	Immediate response
2.Those that go on for months and years after a disaster and involves constructing destroyed houses, schools, hospitals is known as ...	Long term responses
3. In Myanmar replanting has taken place in the ...	Mangroves
4. After cyclone Nargis the government ordered people to not remove the ...d	Dead bodies
5. The Australian army distributed aid such as ..	Clean water
6. Evacuation was ordered but was not effective as many people did not have ...	TV's and radios
7. After hurricane Katrina the levees were repaired in 53 places which cost ...	\$14.5 billion
8. The percentage of people evacuated was ...	80%
9. Homes were not rebuilt in ...	The lower 9th ward
10. The US coastguard carried out search and rescue which saved ...	50,000 people

