

YISHUN SECONDARY SCHOOL  
 Subject & Code: 2236 Pure Geography  
 Level & Stream: Sec 3 (Express) 2020

<b>The Curriculum and Approaches to Learning</b>		<b>Key Programmes / Competitions</b>
<p>Geography emphasises the integrative study of physical and human environments to enable students to gain better understanding of their own space and other parts of the world. It also focuses on the interconnectedness among groups of people, and between people and their environment that occur in different places and cultures. Equipped with the skills of gathering and analysing information, and an inquiring mind to seek answers to issues affecting our lives and the world we live in, Geography students are prepared for their roles as informed citizens in the 21st century.</p>		<ul style="list-style-type: none"> <li>- Geographical Investigation</li> <li>- Use of GIS</li> <li>- Humanities Week</li> <li>- Teaching through Inquiry, key concepts and Big Ideas</li> <li>- Assessment for learning approaches to assess students and provide feedback to help them improve.</li> </ul>
<b>Term / Week</b>	<b>Learning Experiences (chapter, activity)</b>	<b>Learning Outcomes &amp; Assessment</b>
<b>Term 1</b>	Chapter 1 Coasts – Should coastal environments matter?	
Week 1-2	<p><b>Gateway 1:</b>  <b>How and why coastal environment different and dynamic?</b></p> <ul style="list-style-type: none"> <li>• Explain the dynamic nature of coastal environments</li> <li>• Explain how waves are generated and the factors influencing wave energy</li> <li>• Explain wave refraction and the processes which occur when waves break</li> <li>• Describe the different types of waves and their associated coastal environments</li> <li>• Explain the different coastal processes</li> </ul>	<p><b>Skills</b></p> <ul style="list-style-type: none"> <li>• Identify coastal landforms and features shown in topographical maps, photographs and sketches</li> <li>• Draw and label a field sketch of a coastal area shown in a photograph</li> <li>• Investigate how wave type influences beach profile and how longshore drift forms characteristic landforms</li> </ul>
Week 2-4	<ul style="list-style-type: none"> <li>• Describe and explain the formation of cliffs, headlands, caves, arches, stacks and shore platforms</li> </ul>	

	<ul style="list-style-type: none"> <li>Describe and explain the formation of bays, beaches, spits and tombolos</li> </ul>	
Week 4	<b>CNY Holidays</b>	
Week 5-8	<p><b>Gateway 2:</b>  <b>Why are coastal areas vulnerable?</b></p> <ul style="list-style-type: none"> <li>Explain how the distinctive characteristics of coastal areas support a variety of human activities</li> <li>Describe the global distribution and characteristics of coral reef ecosystem</li> <li>Explain the value of coral reef ecosystem in the coastal environment</li> <li>Discuss the pressures that threaten the coral reef ecosystem</li> <li>Describe the global distribution and characteristics of mangrove ecosystem</li> <li>Explain the value of the mangrove ecosystem in the coastal environment</li> <li>Discuss the pressures that threaten the mangrove ecosystem</li> </ul> <p>** Prep for WA1</p>	<p>Week 6  WA1 Coasts Gateway 1</p> <p><b>Skills</b></p> <ul style="list-style-type: none"> <li>Locate major coral reef and mangrove areas on the world map</li> <li>Identify the characteristics of mangroves shown in photographs and sketches that help them to adapt to the coastal environment</li> <li>Identify the different kinds of human activities in coastal areas shown in maps, photographs and sketches</li> </ul>
Week 9-10	<p><b>Gateway 3:</b>  <b>How can we manage coastal areas in a sustainable manner?</b></p> <ul style="list-style-type: none"> <li>Explain how coastal areas can be managed in a sustainable manner</li> <li>Evaluate the effectiveness of measures to protect the coast from erosion</li> </ul> <p>** WA1 &amp; Corrections</p>	<p><b>Skills</b></p> <ul style="list-style-type: none"> <li>Identify engineering measures adopted to mitigate coastal erosion in the field and shown in photographs and sketches</li> <li>Analyse satellite images on changes in selected coastlines over two time periods</li> </ul>
<b>Term / Week</b>  <b>Term 2</b>	<b>Learning Experiences (chapter, activity)</b>	<b>Learning Outcomes &amp; Assessment</b>
Week 1-2	<p><b>Gateway 1:</b>  <b>Why do different places experience different weather and climate?</b></p>	<p><b>Skills</b></p> <ul style="list-style-type: none"> <li>Make calculations of the following weather data: <ul style="list-style-type: none"> <li>Annual range</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>• Differentiate between weather and climate</li> <li>• Explain the daily and seasonal variations in temperature at a particular location</li> <li>• Compare and explain the variations in temperature between different locations</li> </ul>	<ul style="list-style-type: none"> <li>– Diurnal range</li> <li>– Mean monthly</li> <li>– Relative humidity</li> <li>• Use appropriate graphs and diagrams to present weather data</li> </ul> <p>GIS lesson on reasons for the variations in temperature between different locations</p>
Week 3-4	<ul style="list-style-type: none"> <li>• Explain the differences in relative humidity in different locations</li> <li>• Explain the formation of convectional rain and relief rain</li> <li>• Explain how coastal temperatures are moderated by land and sea breezes</li> <li>• Explain the formation of monsoon winds</li> <li>• Describe and explain the distribution and characteristics of equatorial, monsoon and cool temperate climates</li> <li>• Describe and explain the weather and climate of Singapore with reference to rainfall, relative humidity and temperature</li> </ul>	
Week 6-7	<p><b>Gateway 2:</b> <b>What is happening to the earth's climate?</b></p> <ul style="list-style-type: none"> <li>• Describe and explain climate change since 1880</li> <li>• Explain the greenhouse effect</li> <li>• Discuss the natural causes of recent climate change</li> <li>• Explain how human activities lead to enhanced greenhouse effect</li> <li>• Discuss the impact of climate change</li> <li>• Describe the responses to climate change</li> </ul> <p>** Prep for WA2</p>	<p><b>Skills</b></p> <ul style="list-style-type: none"> <li>• Extract information, describe trends and draw conclusions from graphs on temperature and greenhouse gases</li> </ul>
Week 8-9	<p><b>Gateway 3:</b> <b>Is the weather becoming more extreme?</b></p> <ul style="list-style-type: none"> <li>• Describe the location and characteristics of tropical cyclones</li> </ul>	<p><b>Week X WA2 Gateway 1&amp;2 [Tentative]</b></p> <p><b>Skills</b></p>

	<ul style="list-style-type: none"> <li>Discuss the impact of tropical cyclones on human lives and the environment</li> <li>Evaluate the effectiveness of measures adopted to mitigate and respond to the effects of tropical cyclones</li> </ul> <p>**WA2</p>	<ul style="list-style-type: none"> <li>Track the path of a selected tropical cyclone from satellite images</li> <li>Locate selected tropical cyclones on a map and discuss their impact</li> </ul>
Week 10	Geographical Investigation [Coast GI] ** Corrections for WA2	
<b>Term / Week</b>	<b>Learning Experiences (chapter, activity)</b>	<b>Learning Outcomes &amp; Assessment</b>
Term 3	Chapter 2 Living with Tectonic Hazards- Risk or opportunity?	
Week 1-3	<p><b>Gateway 1:</b> <b>Why are some areas more prone to tectonic hazards?</b></p> <ul style="list-style-type: none"> <li>Outline the main types of natural hazards</li> <li>Describe the internal structure of the Earth</li> <li>Explain the movement of tectonic plates</li> <li>Describe the global distribution of tectonic plates and types of plate boundaries</li> </ul>	<p><b>Skills</b></p> <ul style="list-style-type: none"> <li>Draw and annotate a diagram showing the internal structure of the Earth</li> <li>Identify and label major plates and the boundary types on maps</li> <li>Draw labelled diagrams showing the different types of movements taking place at plate boundaries</li> </ul>
Week 4	<p><b>Gateway 2:</b> <b>What landforms and associated tectonic phenomena are found at plate boundaries?</b></p> <ul style="list-style-type: none"> <li>Discuss how plate movements influence the general distribution of landforms and associated phenomena</li> <li>Describe the landforms and phenomena associated with plate movements</li> <li>Explain the causes of landforms and phenomena associated with plate movements</li> </ul>	<p><b>Skills</b></p> <ul style="list-style-type: none"> <li>Analyse maps and photographs of major tectonic landforms and phenomena to derive the relationship between their distribution patterns and plate boundaries (e.g. Pacific 'Ring of Fire')</li> </ul>
Week 5-7	<ul style="list-style-type: none"> <li>Describe the structure of volcanoes</li> <li>Explain the characteristics of volcanoes</li> <li>Explain the formation of volcanoes</li> </ul>	<p><b>Skills</b></p> <ul style="list-style-type: none"> <li>Draw an annotated cross-section of a volcano</li> </ul>

	<ul style="list-style-type: none"> <li>• Discuss the benefits and risks of living in volcanic areas</li> <li>• Discuss the impact of earthquakes on people living in areas prone to this natural hazard</li> </ul>	<ul style="list-style-type: none"> <li>• Draw labelled diagrams to show the formation of a fold mountain, a rift valley, a block mountain and a volcano</li> </ul>
Week 8-10	<ul style="list-style-type: none"> <li>• Discuss the responses of people to earthquakes and tsunamis</li> <li>• Assess the effectiveness of strategies in mitigating and responding to the effects of earthquakes and tsunamis</li> </ul> <p>** WA3 &amp; Corrections</p>	<p><b>Week X WA3 Plate Tectonics Gateway 1&amp;2 [Tentative]</b></p> <p><b>Skills</b></p> <ul style="list-style-type: none"> <li>• Examine before and after satellite images and aerial photographs of a place affected by an earthquake or tsunami to identify and analyse the changes that have occurred</li> </ul>
Term / Week	Learning Experiences (chapter, activity)	Learning Outcomes & Assessment
Term 4		
Week 1-2	EOY Revision	
Week 3-4	End-of-Year Examination	
Week 5	Script Checking	
Week 6-7	[Tentative] Head start programme / Tourism GI @ GBTB	