## YISHUN SECONDARY SCHOOL

Subject & Code: 2260 Level & Stream: Sec 3 (Express) – 2023

Term / Week	Learning Experiences (Chapter & Activity)	Learning Outcomes & Assessment
Term 1 Wk 1	<ul><li>Back-to-school programme</li><li>Setting expectations</li></ul>	
Term 1 Wk 2	<ul> <li>Key Question</li> <li>What is the relationship between people and nature in their neighbourhoods?</li> <li>Content Activity</li> <li>Conducting of questionnaire survey         <ul> <li>Analysing peoples' experiences with their neighbourhood</li> </ul> </li> <li>Mental map         <ul> <li>Identifying places of nature areas in the neighbourhood</li> </ul> </li> <li>Online research on positive/negative interactions of nature and people in neighbourhoods in Singapore</li> <li>Classroom sharing on findings from own observations of humannature interactions to prove hypothesis</li> </ul>	<ul> <li>Learning Outcome(s)</li> <li>Relationship between people and nature</li> <li>Benefits enjoyed by people and nature</li> <li>Disadvantages to people and nature</li> <li>Skill Focus</li> <li>Conducting of questionnaire survey</li> <li>Online research using PLDs</li> <li>Crafting of hypothesis         <ul> <li>To find out on possible positive/negative human-nature interactions</li> </ul> </li> <li>Presentation skills         <ul> <li>To present findings from own observations of human-nature interactions to prove hypothesis</li> </ul> </li> </ul>
Term 1 Wks 3 – 4	CHINESE NEW YEAR (21st – 23rd January 19th January 2023 – School's celebration  How do people acquire a sense of place in their neighbourhoods?  Content Activity  Mental map Identifying places of fond memories in school Focusing on elements that make up that sense of place of fond memories in school Creating a video that highlights a memorable place in school	

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Term 1 Wks 5 – 6	<ul> <li>Key Question         <ul> <li>What is the relationship between locations in a neighbourhood?</li> </ul> </li> <li>Content Activity         <ul> <li>Sensory walk to investigate and represent spatial patterns at Chong Pang</li> </ul> </li> </ul>	Learning Outcome(s) Students will understand: Regions Spatial patterns Spatial associations  Skill Focus Data representation of data collected to show patterns and associations
Term 1 Wks 7 – 8	<ul> <li>Key Question         <ul> <li>How are neighbourhoods organised in Singapore?</li> </ul> </li> <li>Content Activity         <ul> <li>Analysing street directories or Geospatial Technologies (MOE EduGIS) to compare the layout of these estates</li> </ul> </li> </ul>	Learning Outcome(s) Students will understand: Spatial scales in Singapore Spatial hierarchies in Singapore Town planning in Singapore  Skill Focus Analysing street directories or Geospatial Technologies (MOE EduGIS) Comparison of different reasons for the various layouts of neighbourhood in Singapore (e.g. Bukit Merah vs Sengkang)
Term 1 Wk 9	<ul> <li>Key Question         <ul> <li>What are sustainable urban neighbourhood?</li> </ul> </li> <li>Content Activity         <ul> <li>Identifying and analysing efforts made in neighbourhood to encourage sustainable living</li> <li>Research on articles that highlights efforts made to make Singapore a more sustainable place to live</li> </ul> </li> </ul>	Learning Outcome(s) Students will understand: Sustainable development Economic and social sustainability in urban neighbourhoods Environmental sustainability in urban neighbourhood  Skill Focus Annotating on photograph to show key aspects of sustainable living in neighbourhood Comparison of different features seen in mature and non-mature estates Presentation of information collected from research on articles that highlights efforts made to make Singapore a more sustainable place to live

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Term 1 Wk 10	<ul><li>Revision for WA1/Buffer Week</li><li>WA1</li></ul>	
March Holidays (13 <sup>th</sup> March 2023 – 19 <sup>th</sup> March 2023)		

Term 2	Buffer Week	Error analysis of WA1
Wk 1	<ul><li>Going through of WA1</li><li>Holiday Assignment</li></ul>	Error analysis of holiday assignment
Term 2 Wk 2	<ul> <li>Key Question</li> <li>What ecosystem services are found in urban neighbourhoods?</li> <li>Content Activity</li> <li>Investigate regulating services by researching on flooding in the Orchard area and identify measures taken to mitigate the efforts of future flooding in the area</li> </ul>	Learning Outcome(s) Students will learn and understand:  Urban neighbourhoods as ecosystems Provisioning and regulating services Cultural and supporting services  Skill Focus Internet research on Orchard flooding
Term 2 Wk 3	<ul> <li>Key Question</li> <li>What are common hazards in urban neighbourhoods?</li> <li>Content Activity</li> <li>Identifying fire, air pollution and traffic hazards in the school's compound</li> </ul>	Learning Outcome(s) Students will learn and understand: Fire hazards in neighbourhood Air pollution hazards Traffic hazards  Skill Focus Annotate on photograph depicting fire, air pollution and traffic hazards in their neighbourhood Suggest reasons to educate residents and possible ways to reduce these hazards
Term 2 Wk 4	WA2  Key Question     How to build sustainable urban neighbourhoods?  Content Activity     Identifying an area in school where students can nurture Eco Stewardship     In groups, students will write a proposal to School Principal highlighting the different elements of Eco Stewardship and why proposed area will be able to help to so	Learning Outcome(s) Students will learn and understand:  • Environmental stewardship  • Disaster risk management  • Community resilience  Skill Focus  • Analysing and justifying reasons for an area where students can nurture Eco Stewardship  • Proposal writing

Term 2 Wk 5	Key Question     How to design fieldwork?      Content Activity     Using the school's context, identify a research area that can help the school improve in terms of sustainable development  Hari Raya Puasa School Holiday (24th)	Learning Outcome(s) Students will understand:  • What are research questions and hypotheses  • Data collection sequence through primary and/or secondary sources  • Limitations and risks during data collection  Skill Focus  • Crafting of hypothesis  • Data collection  April 2023)
Wk 6	YSS Learning Fest (25th – 27th April 20	•
Term 2 Wk 7	<ul><li>Key Question</li><li>How to collect primary data?</li></ul>	Learning Outcome(s) Students will understand:  • What are the different sampling methods  • Closed-ended questionnaire surveys  • Mental maps  Skill Focus  • Data Response Questions  • Describe and explain data
		Annotate diagrams
	Going through of WA2	Error Analysis of WA2
Term 2 Wk 8	Key Question     How to process and analyse data?  Cross Country (42th May 2022)	Learning Outcome(s) Students will understand: Closed-ended questionnaire surveys how to interpret responses using measures of frequency including counts and percentages How to interpret responses using measures of central tendency including mean, mode and median Mental maps How maps represent reality How features and labels are drawn or added Patterns and relationships Visualizing positive and negative correlations using scatter plots and best-fit lines
Term 2	Cross Country (12 <sup>th</sup> May 2023)  Key Question	<u>Learning Outcome(s)</u>
Wks 9 – 10	How to present findings?	Students will learn and understand:

	<ul> <li>How maps can represent spatial information</li> <li>using graphs such as pie charts and bar graphs to show distributions</li> <li>photographs and texts         <ul> <li>e.g. use of satellite and aerial images to display spatial information use of colourcoded quotations and word clouds to represent qualitative analyses</li> </ul> </li> </ul>
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Term 3 Wks 1	Key Question  What is weather and climate?  Content Activity  Compare weather and climate  Identify various weather elements	Learning outcomes Students will learn and understand:  • Weather  • Climate  • Climate hazards and its impacts on human  • The characteristic of tropical equatorial, tropical monsoon and cool temperate climatic types.
		<ul> <li>Skill Focus</li> <li>Data Response Questions         <ul> <li>Analysis of tables to determine relationship of variables</li> <li>Calculation of mean temperature and temperature range</li> </ul> </li> </ul>
Term 3 Wk 2	<ul> <li>Key Question</li> <li>Why does air temperature vary across Earth's surface?</li> </ul>	Learning outcomes Students will learn and understand:  • Earth's rotation and revolution  • Latitude and altitude in affecting temperature  • Nature of surfaces and distance from sea  Skill Focus  • Data Response Questions  • Describe and explain data
	<ul> <li>Key Question</li> <li>Why does precipitation vary across Earth's surface?</li> </ul>	Learning outcomes Students will learn and understand:  • Water cycle • Relative humidity • Clouds and precipitation  Skill Focus • Annotate convectional and relief rainfall diagrams • Data Response Questions • Describe and explain data
Term 3 Wk 3	<ul> <li>Key Question</li> <li>Why does wind direction and wind speed vary across Earth's surface?</li> </ul>	Learning outcomes Students will learn and understand:  Unequal distribution of air temperature Wind speed

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	(C.1.1)	<ul> <li>Local and regional wind</li> <li>Skill Focus</li> <li>Annotate local and regional wind diagrams</li> <li>Data Response Questions</li> <li>Describe and explain data</li> </ul>
	<ul><li>Key Question</li><li>What is the natural variability of climate?</li></ul>	Learning outcomes Students will learn and understand:  Evidence of past climates  Changing climate zones  Climate variability due to natural processes  Skills Focus  Structured Essay Question
Term 3 Wk 4	<ul> <li>Key Question         <ul> <li>How do anthropogenic factors contribute to climate change?</li> </ul> </li> <li>Content Activity         <ul> <li>Inquiry Question: Are humans to blame for climate change or is it a natural event?</li> </ul> </li> </ul>	Learning outcomes Students will learn and understand:  Growth in population and industrialization  Causes of the greenhouse effect  Causes of the enhanced greenhouse effect  Skills Focus  Structured Essay Question  Data Response Questions  Describe and explain data
Term 3 Wk 5	<ul> <li>Key Question</li> <li>How might climate change affect natural systems?</li> </ul>	Learning outcomes Students will learn and understand: Impact of climate change on natural systems Impact of climate change on aquatic ecosystems Impact of climate change on terrestrial ecosystems
	<ul><li>Key Question</li><li>How might climate change affect human systems?</li></ul>	<ul> <li>Learning outcomes</li> <li>Students will learn and understand:</li> <li>Impact of climate change on human systems</li> <li>Direct impact of climate change on human systems</li> </ul>

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		Indirect impact of climate change on human systems
Term 3 Week 6	<ul> <li>Key Question</li> <li>How does climate action help achieve sustainable development?</li> </ul>	Learning outcomes Students will learn and understand: Climate action Climate change is a threat multiplier Climate change constrains development path
	<ul><li>Key Question</li><li>Why do climate risks vary across places?</li></ul>	Learning outcomes Students will learn and understand: Climate risks Affected by climate-related hazards Affected by vulnerability and exposure
Term 3 Wk 7	Buffer Week	
Term 3 Wk 8	<ul> <li>Key Question</li> <li>How effective are mitigation strategies in building community resilience to climate change?</li> </ul>	<ul> <li>Learning outcomes</li> <li>Students will learn and understand:</li> <li>Mitigation strategies</li> <li>Mitigation strategies that reduce greenhouse gas emissions</li> <li>Mitigation strategies that enhance carbon sinks</li> </ul>
Term 3 Wk 9	<ul> <li>Key Question</li> <li>How effective are adaptation strategies in building community resilience to climate change?</li> </ul>	<ul> <li>Learning outcomes</li> <li>Students will learn and understand:</li> <li>Adaptation strategies</li> <li>Adaptation strategies with structural and technological approaches</li> <li>Adaptation strategies with social and institutional approaches</li> </ul>
Term 3 Wk 10	<ul><li>Buffer Week</li><li>Intensive Revision to EOY</li></ul>	

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Term 4 Wks 1-3	EOY Revision	
4-5	End of Year Examination	
6	Script-checking	

<sup>\*</sup>All information is correct at the time of publication and may be subjected to change.