Climate change and how it affects the Gold Coast (Excursion).

Economics and Business	Geography	Science	Maths
Biology	Biology AND Earth and Environmental Science		Earth and Environmental Science

Year 7	Year 8	Year 9	Year 10	Senior	
ACHGK038 The ways that flows of water connect places as it moves through the environment and the way this affects places.	**ACHGK048** The different types of landscapes and their distinctive landform features.	**ACHGK069** The effects of people's travel, recreational, cultural or leisure choices on places, and the implications for the future of these places.	**ACHGK070** The human-induced environmental changes that challenge sustainability.	**ACHGE001** Formulates geographical inquiry questions.	**ACHGE002** Plans a geographical inquiry with clearly defined aims and appropriate methodology.
ACHGK042 The causes, impacts and responses to an atmospheric or hydrological hazard.	**ACHGK051** The human causes and effects of landscape degradation.	**ACHGS063** Develop geographically significant questions and plan an inquiry that identifies and applies appropriate geographical methodologies and concepts.	**ACHGK073** The application of human-environment systems thinking to understanding the causes and likely consequences of the environmental change being investigated.	**ACHGE003** Collects geographical information incorporating ethical protocols from a range of primary and secondary sources.	**ACHGE004** Records observations in a range of graphic representations using spatial technologies and information and communication technologies.
ACHGS047 Develop geographically significant questions and plan an inquiry, using appropriate geographical methodologies and concepts.	**ACHGK052** The ways of protecting significant landscapes.	**ACHGS064** Collect, select, record and organise relevant geographical data and information, using ethical protocols, from a range of appropriate primary and secondary sources.	**ACHGK074** The application of geographical concepts and methods to the management of the environmental change being investigated.	**ACHGE005** Evaluates the reliability, validity and usefulness of geographical sources and information.	**ACHGE006** Analyses geographical information and data from a range of primary and secondary sources and a variety of perspectives to draw reasoned conclusions and make generalisations.
ACHGS048 Collect, select and record relevant geographical data and information, using ethical protocols, from appropriate primary and secondary sources.	**ACHGK053** The causes, impacts and responses to a geomorphological hazard.	**ACHGS068** Apply geographical concepts to synthesise information from various sources and draw conclusions based on the analysis of data and information, taking into account alternative points of view.	**ACHGK075** The application of environmental economic and social criteria in evaluating management responses to the change.	**ACHGE007** Identifies and analyses trends and patterns, infers relationships, and makes predictions and inferences.	**ACHGE008** Communicates geographical information, ideas, issues and arguments using appropriate written and/or oral, cartographic and graphic forms.

ACHGS052 Apply geographical concepts to draw conclusions based on the analysis of the data and information collected.	**ACHGS055** Develop geographically significant questions and plan an inquiry using appropriate geographical methodologies and concepts.	**ACHGS070** Present findings, arguments and explanations in a range of appropriate communication forms, selected for their effectiveness and to suit audience and purpose; using relevant geographical terminology, and digital technologies as appropriate.	**ACHGS072** Develop geographically significant questions and plan an inquiry that identifies and applies appropriate geographical methodologies and concepts.	**ACHGE009** Uses geographical language in appropriate contexts to demonstrate geographical knowledge and understanding.	**ACHGE010** Applies generalisations to evaluate alternative responses to geographical issues at a variety of scales.
ACHGS053 Present findings, arguments and ideas in a range of communication forms selected to suit a particular audience and purpose; using geographical terminology and digital technologies as appropriate.	**ACHGS056** Collect, select and record relevant geographical data and information, using ethical protocols, from appropriate primary and secondary sources.	**ACMSP228** Identify everyday questions and issues involving at least one numerical and at least one categorical variable, and collect data directly and from secondary sources.	**ACHGS073** Collect, select, record and organise relevant data and geographical information, using ethical protocols, from a range of appropriate primary and secondary sources.	**ACHGE011** Proposes individual and collective action, taking into account environmental, social and economic factors; and predicts the outcomes of the proposed action.	**ACHGE012** An overview of the nature of natural hazards (atmospheric, hydrological, and geomorphic) and ecological hazards.
ACHGS054 Reflect on their learning to propose individual and collective action in response to a contemporary geographical challenge, taking account of environmental, economic and social considerations, and predict the expected outcomes of their proposal.	**ACHGS057** Evaluate sources for their reliability and usefulness and represent data in a range of appropriate forms, for example, climate graphs, compound column graphs, population pyramids, tables, field sketches and annotated diagrams, with and without the use of digital and spatial technologies.	**ACMSP283** Compare data displays using mean, median and range to describe and interpret numerical data sets in terms of location (centre) and spread.	**ACHGS075** Represent the spatial distribution of geographical phenomena by constructing special purpose maps that conform to cartographic conventions, using spatial technologies as appropriate.	**ACHGE013** The concept of risk as applied to natural and ecological hazards.	**ACHGE014** The temporal and spatial distribution, randomness, magnitude, frequency and scale of spatial impact of natural and ecological hazards at a global scale.

ACMNA173 Recognise and solve problems involving simple ratios.	**ACHGS060** Apply geographical concepts to draw conclusions based on the analysis of the data and information collected.	**ACSHE160** People can use scientific knowledge to evaluate whether they should accept claims, explanations or predictions.	**ACHGS080** Reflect on and evaluate the findings of the inquiry to propose individual and collective action in response to a contemporary geographical challenge, taking account of environmental, economic and social considerations; and explain the predicted outcomes and consequences of their proposal.	**ACHGE015** The role of spatial technologies in the study of natural and ecological hazards.	**ACMEM001** Solve practical problems requiring basic number operations.
ACMSP168 Assign probabilities to the outcomes of events and determine probabilities for events.	**ACHGS062** Reflect on their learning to propose individual and collective action in response to a contemporary geographical challenge, taking account of environmental, economic and social considerations, and predict the expected outcomes of their proposal.	**ACSHE228** The values and needs of contemporary society can influence the focus of scientific research.	**ACSIS198** Formulate questions or hypotheses that can be investigated scientifically.	**ACMEM017** Use metric units of length, their abbreviations, conversions between them, and appropriate levels of accuracy and choice of units.	**ACMEM018** Estimate lengths.
ACSHE119 Scientific knowledge changes as new evidence becomes available, and some scientific discoveries have significantly changed people's understanding of the world.	**ACMSP206** Explore the practicalities and implications of obtaining data through sampling using a variety of investigative processes.	**ACSIS166** Select and use appropriate equipment, including digital technologies, to systematically and accurately collect and record data.	**ACSIS200** Select and use appropriate equipment, including digital technologies, to systematically and accurately collect and record data.	**ACMEM019** Convert between metric units of length and other length units.	**ACMEM020** Calculate perimeters of familiar shapes, including triangles, squares, rectangles, and composites of these.
ACSHE120 Science and technology contribute to finding solutions to a range of contemporary issues; these solutions may impact on other areas of society and involve ethical considerations.	**ACMSP284** Investigate techniques for collecting data, including census, sampling and observation.	**ACSIS170** Use knowledge of scientific concepts to draw conclusions that are consistent with evidence.	**ACSIS204** Use knowledge of scientific concepts to draw conclusions that are consistent with evidence.	**ACMEM021** Use metric units of area, their abbreviations, conversions between them, and appropriate choices of units.	**ACMEM022** Estimate the areas of different shapes.

ACSIS125 Collaboratively and individually plan and conduct a range of investigation types, including fieldwork and experiments, ensuring safety and ethical guidelines are followed.	**ACMSP292** Represent events in two-way tables and Venn diagrams and solve related problems.	**ACSIS171** Evaluate conclusions, including identifying sources of uncertainty and possible alternative explanations, and describe specific ways to improve the quality of the data.	**ACSIS205** Evaluate conclusions, including identifying sources of uncertainty and possible alternative explanations, and describe specific ways to improve the quality of the data.	**ACMEM027** Use metric units of volume, their abbreviations, conversions between them, and appropriate choices of units.	**ACMEM039** Discuss and interpret graphs found in the media and in factual texts.
ACSIS126 In fair tests, measure and control variables, and select equipment to collect data with accuracy appropriate to the task .	**ACMSP293** Explore the variation of means and proportions of random samples drawn from the same population.	**ACSIS172** Critically analyse the validity of information in secondary sources and evaluate the approaches used to solve problems.	**ACSIS206** Critically analyse the validity of information in secondary sources and evaluate the approaches used to solve problems.	**ACSBL001** **ACSES001** Identify, research and construct questions for investigation; propose hypotheses; and predict possible outcomes.	**ACSBL010** **ACSES010** Advances in science understanding in one field can influence other areas of science, technology and engineering.
ACSIS129 Construct and use a range of representations, including graphs, keys and models to represent and analyse patterns or relationships, including using digital technologies as appropriate.	**ACSHE134** Scientific knowledge changes as new evidence becomes available, and some scientific discoveries have significantly changed people's understanding of the world.	**ACSIS174** Communicate scientific ideas and information for a particular purpose, including constructing evidence-based arguments and using appropriate scientific language, conventions and representations.	**ACSIS208** Communicate scientific ideas and information for a particular purpose, including constructing evidence-based arguments and using appropriate scientific language, conventions and representations.	**ACSBL011** **ACSES011** The use of scientific knowledge is influenced by social, economic, cultural and ethical considerations.	**ACSBL012** **ACSES012** The use of scientific knowledge may have beneficial and/or harmful and/or unintended consequences.
ACSIS130 Summarise data, from students' own investigations and secondary sources, and use scientific understanding to identify relationships and draw conclusions.	**ACSHE226** Science knowledge can develop through collaboration and connecting ideas across the disciplines of science.	**ACSSU176** Ecosystems consist of communities of interdependent organisms and abiotic components of the environment; matter and energy flow through these systems.		**ACSBL013** **ACSES013** Scientific knowledge can enable scientists to offer valid explanations and make reliable predictions.	**ACSBL014** **ACSES014** Scientific knowledge can be used to develop and evaluate projected economic, social and environmental impacts and to design action for sustainability.
ACSIS130 Summarise data, from students' own investigations and secondary sources, and use scientific understanding to identify relationships and draw conclusions.	**ACSIS139** Identify questions and problems that can be investigated scientifically and make predictions based on scientific knowledge.			**ACSES015** Observation of present day processes can be used to infer past events and processes by applying the Principle of Uniformitarianism.	

ACSIS131 Reflect on the method used to investigate a question or solve a problem, including evaluating the quality of the data collected, and identify improvements to the method.	**ACSIS140** Collaboratively and individually plan and conduct a range of investigation types, including fieldwork and experiments, ensuring safety and ethical guidelines are followed.				
	ACSIS145 Summarise data, from students' own investigations and secondary sources, and use scientific understanding to identify relationships and draw conclusion.				
	ACSIS148 Communicate ideas, findings and solutions to problems using scientific language and representations using digital technologies as appropriate.				