









Future Makers

Future Makers is an innovative partnership between Queensland Museum Network and Shell's QGC business aiming to increase awareness and understanding of the value of science, technology, engineering and maths (STEM) education and skills in Queensland.

This partnership aims to engage and inspire people with the wonder of science, and increase the participation and performance of students in STEM-related subjects and careers — creating a highly capable workforce for the future.

Cover Image: Green algae, Caulerpa racemose. QM, Gary Cranitch.

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EXPLORE

Citizens of the Sea: Community of Inquiry

Teacher Resource

In this activity, students participate in a community of inquiry to discuss their connection to the marine environment. The community of inquiry provides students with an opportunity to reach a deep, shared understanding of the concepts and issues underpinning the inquiry topic. The community of inquiry may be used as an introduction to the *Making Connections: Object and Article Analysis* activity or anywhere throughout the unit.

The community of inquiry is a process of discussion where participants pose open-ended questions, listen to the viewpoints of others and share their own ideas. Disputed or contestable issues and concepts are considered collaboratively within a supportive and respectful learning environment. It is important that all participants reflect on their thinking.

The following ways of working are used during the community of inquiry process. These should be put up on a wall for all students to refer to throughout the process:

- Listen attentively to others
- Build upon and connect ideas
- Have respect for others, yourself and place
- Disagree reasonably and respectfully
- Many responses and opinions may be considered to be correct

Detailed step-by-step instructions for this activity can be seen below.

- 1. Show students the quote from Dr Ian Poiner, Chairperson of the Great Barrier Reef Marine Park Authority, **'We are all citizens of the sea'**.
- 2. In small groups, ask students to discuss the overarching question: **What could this quote mean?**Remind students to give reasons for their answers.
- 3. Ask students to share their responses to these questions which can be recorded on a whiteboard or butchers paper.
- 4. Define the word 'citizen' with your students, then pose the following question: Being a citizen implies rights and responsibilities, whether you are a citizen of the world, your country, your state, your community or your family. If we are citizens of the sea, what rights and responsibilities might we owe this place? Students should again discuss in small groups.
- 5. Ask students to share their responses to this question, and record their answers on a whiteboard or butchers paper. Record any questions posed by students on a separate page. These can be addressed in the future.
- 6. Keep a record of students' responses to display around the room. These can be referred and added to throughout the unit.

Curriculum Links

Science

YEAR 5

Science as a Human Endeavour

Scientific knowledge is used to solve problems and inform personal and community decisions (ACSHE083)

Science Inquiry Skills

Communicate ideas, explanations and processes using scientific representations in a variety of ways, including multimodal texts (ACSISO93)

YEAR 6

Science as a Human Endeavour

Scientific knowledge is used to solve problems and inform personal and community decisions (ACSHE100)

Science Inquiry Skills

Communicate ideas, explanations and processes using scientific representations in a variety of ways, including multimodal texts (ACSIS110)

YFAR 7

Science as a Human Endeavour

Solutions to contemporary issues that are found using science and technology, may impact on other areas of society and may involve ethical considerations (ACSHE120)

Science Inquiry Skills

Communicate ideas, findings and evidence based solutions to problems using scientific language, and representations, using digital technologies as appropriate (ACSIS133)

YEAR 8

Science as a Human Endeavour

Solutions to contemporary issues that are found using science and technology, may impact on other areas of society and may involve ethical considerations (ACSHE135)

Science Inquiry Skills

Communicate ideas, findings and evidence based solutions to problems using scientific language, and representations, using digital technologies as appropriate (ACSIS148)

YEAR 9

Science as a Human Endeavour

Values and needs of contemporary society can influence the focus of scientific research (ACSHE228)

Science Inquiry Skills

Communicate scientific ideas and information for a particular purpose, including constructing evidence-based arguments and using appropriate scientific language, conventions and representations (ACSIS174)

Humanities and Social Sciences

YEAR 5

Knowledge and Understanding: Geography

The influence of people, including Aboriginal and Torres Strait Islander Peoples, on the environmental characteristics of Australian places (ACHASSK112)

The environmental and human influences on the location and characteristics of a place and the management of spaces within them (ACHASSK113)

Geography

YEAR 10

Geographical Knowledge and Understanding

Human-induced environmental changes that challenge sustainability (ACHGK070)

Environmental world views of people and their implications for environmental management (ACHGK071)

General Capabilities

Literacy

Comprehending texts through listening, reading and viewing

Critical and Creative Thinking

Inquiring: Identifying, exploring and organising information and ideas

Reflecting on thinking and processes

Personal and Social Capability

Self-management

Social awareness

Ethical Understanding

Understanding ethical concepts and issues Reasoning in decision making and actions Exploring values, rights and responsibilities

Intercultural Understanding

Interacting and empathising with others

Cross-Curriculum Priorities

Sustainability

Sustainable patterns of living rely on the interdependence of healthy social, economic and ecological systems. (Ol.3)

World views are formed by experiences at personal, local, national and global levels, and are linked to individual and community actions for sustainability. (Ol.5)

Actions for a more sustainable future reflect values of care, respect and responsibility, and require us to explore and understand environments. (OI.7)

Designing action for sustainability requires an evaluation of past practices, the assessment of scientific and technological developments, and balanced judgements based on projected future economic, social and environmental impacts. (Ol.8)