



# Watery Reflections: Community of Inquiry

YEAR 5-10



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# 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.

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# Watery Reflections: Community of Inquiry

## Teacher Resource

In this activity, students participate in a community of inquiry to review and reflect on learning and new understandings and skills. This process provides students with an opportunity to reach a deep, shared understanding of the concepts and issues underpinning the inquiry topic.

The community of inquiry is a structured, dialogic process that requires participants to ask open inquiry questions, listen and think, share ideas and consider alternative viewpoints. Problematic issues and concepts are discussed collaboratively within a supportive learning environment where all views are considered and respected. Reflecting on thinking is integral to the process.

The following engagement protocols are used during the community of inquiry process, and these should be included on the walls for all students to see.

- Listen attentively
- Build on and connect ideas
- Respect self, others and place
- Disagree reasonably and respectfully
- There may be many responses considered to be correct

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

1. If students completed the *Water Matters* design challenges, ask them to discuss the following questions in small groups: **How did you think ethically and fairly in your designs?** Encourage students to give reasons for their answers.
2. Ask students to share their responses to this question. Record students' answers on the whiteboard or butchers paper.
3. Pose the next question: **What could you as a community/individual do to encourage people to care about water conservation?** Students discuss the question in small groups.
4. Ask students to share their response to this question. Record students' answers on the whiteboard or butchers paper.
5. Pose the final question: **What actions could you as individuals/members of a community take in response to your new learning?**
6. Ask students to share their response to this question. Record students' answers on the whiteboard or butchers paper.

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## 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 multi-modal texts (AC SIS093)

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 multi-modal texts (AC SIS110)

YEAR 7

#### Science Understanding

Some of Earth's resources are renewable, including water that cycles through the environment, but others are non-renewable (ACSSU116)

#### 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 (AC SIS133)

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 (AC SIS148)

### Geography

YEAR 7

#### Geographical Knowledge and Understanding

The nature of water scarcity and ways of overcoming it, including studies drawn from Australia and West Asia and/or North Africa (ACHGK040)

#### General Capabilities

##### Literacy

Composing texts through speaking, writing and creating

##### Critical and Creative Thinking

Inquiring – Identifying, exploring and organising information and ideas

Generate ideas, possibilities and actions

Reflecting on thinking and processes

##### Personal and Social Capability

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

The sustainability of ecological, social and economic systems is achieved through informed individual and community action that values local and global equity and fairness across generations into the future. (OI.6)

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. (OI.8)

Sustainable futures result from actions designed to preserve and/or restore the quality and uniqueness of environments. (OI.9)