

# NATURAL CURIOSITY AT MUSEUM OF TROPICAL QUEENSLAND

## Australian Curriculum Links

*Natural Curiosity* links strongly to the Australian Curriculum in the area of science, as well as directly linking to the general capabilities of literacy, numeracy, and critical and creative thinking. Examples of links for Foundation to Year 10 are listed below.

### General Capabilities

#### Literacy

Comprehending texts through listening, reading and viewing

Text, word and visual knowledge

#### Numeracy

Recognise and using patterns and relationships

#### Critical and Creative Thinking

Inquiring – identifying, exploring and organising information and ideas

Generating ideas, possibilities and actions

Reflecting on thinking and processes

Foundation – Year 2
<b>Science Understanding</b>
Living things have basic needs, including food and water (Foundation ACSSU002) Living things have a variety of external features (Yr 1 ACSSU017) Living things grow, change and have offspring similar to themselves (Year 2 ACSSU030)
<b>Science as Human Endeavour</b>
Science involves observing, asking questions about, and describing changes in, objects and events (Foundation ACSHE013, Yr 1 ACSHE021 & Yr 2 ACSHE034)
<b>Science Inquiry Skills</b>
Pose and respond to questions about familiar objects and events (Foundation ACSIS014) Pose and respond to questions, and make predictions about familiar objects and events (Yr 1 ACSIS024, Yr 2 ACSIS037)
Years 3 – 4
<b>Science Understanding</b>
Living things can be grouped on the basis of observable features (Yr 3 ACSSU044) Living things have life cycles (Year 4 ACSSU072) Living things depend on each other and the environment to survive (Year 4 ACSSU073)
<b>Science as Human Endeavour</b>
Science involves making predictions and describing patterns and relationships (Yr 3 ACSHE050, Yr 4 ACSHE061) Science knowledge helps people to understand the effect of their actions (Yr 3 ACSHE051, Yr 4 ACSHE062)

<b>Years 5 – 6</b>
<b>Science Understanding</b>
Living things have structural features and adaptations that help them to survive in their environment (Year 5 ACSSU043) The growth and survival of living things are affected by physical conditions of their environment (Year 6 ACSSU094)
<b>Science as Human Endeavour</b>
Science involves testing predictions by gathering data and using evidence to develop explanations of events and phenomena (Yr 5 ACSHE081, Yr 6 ACSHE098)
<b>Science Inquiry Skills</b>
Pose clarifying questions and make predictions about scientific investigations (Yr 5 ACSIS231, Yr 6 ACSIS232)
<b>Years 7 – 8</b>
<b>Science Understanding</b>
Classification helps organise the diverse group of organisms (Year 7 ACSSU111) Multi-cellular organisms contain systems of organs carrying out specialised functions that enable them to survive and reproduce (Year 8 ACSSU150)
<b>Science as Human Endeavour</b>
Scientific knowledge has changed peoples' understanding of the world and is refined as new evidence becomes available (Yr 7 ACSHE119, Yr 8 ACSHE134) Solutions to contemporary issues that are found using science and technology, may impact on other areas of society and may involve ethical considerations (Yr 7 ACSHE120, Yr 8 ACSHE135) People use science understanding and skills in their occupations (Yr 7 ACSHE121)
<b>Science Inquiry Skills</b>
Identify questions and problems that can be investigated scientifically and make predictions based on scientific knowledge (Yr 7 ACSIS124, Yr 8 ACSIS139) Reflect on scientific investigations including evaluating the quality of the data collected, and identifying improvements (Yr 7 ACSIS131, Yr 8 ACSIS146)

## Year 9 – 10

### Science Understanding

Multi-cellular organisms rely on coordinated and interdependent internal systems to respond to changes to their environment (Yr 9 ACSSU175)  
Transmission of heritable characteristics from one generation to the next involves DNA and genes (Yr 10 ACSSU184)  
The theory of evolution by natural selection explains the diversity of living things and is supported by a range of scientific evidence (Yr 10 ACSSU185)

### Science as Human Endeavour

Scientific understanding, including models and theories, is contestable and is refined over time through a process of review by the scientific community (Yr 9 ACSHE157, Yr 10 ACSHE191)  
Advances in scientific understanding often rely on technological advances and are often linked to scientific discoveries (Yr 9 ACSHE158, Yr 10 ACSHE192)  
People use scientific knowledge to evaluate whether they accept claims, explanations or predictions, and advances in science can affect people's lives, including generating new career opportunities (Yr 9 ACSHE160, Yr 10 ACSHE194)  
Values and needs of contemporary society can influence the focus of scientific research (Yr 9 ACSHE228, Yr 10 ACSHE230)

### Science Inquiry Skills

Formulate questions or hypotheses that can be investigated scientifically (Yr 9 ACSIS164, Yr 10 ACSIS198)  
Use knowledge of scientific concepts to draw conclusions that are consistent with evidence (Yr 9 ACSIS170, Yr 10 ACSIS204)  
Evaluate conclusions, including identifying sources of uncertainty and possible alternative explanations, and describe specific ways to improve the quality of the data (Yr 9 ACSIS171, Yr 10 ACSIS205)  
Critically analyse the validity of information in primary and secondary sources and evaluate the approaches used to solve problems (Yr 9 ACSIS172, Yr 10 ACSIS206)