

Curriculum Links for Schools

The various activities, shows and stalls featured at WSFQ Schools Day highlight a diverse array of STEM careers and topics, with content that connects to issues, themes and technological developments relevant to student's lives as well as the school curriculum.

The Schools Day program links to the Australian Curriculum, QCAA Senior Syllabus and Early Years Learning Framework across a range of areas. A selection of specific links to the Australian Curriculum and Early Years Learning Frameworks are provided below to assist with planning your visit and relating it back to classroom learning.

Links to the Early Years Learning Framework

- Outcome 1: Children have a strong sense of identity
- Outcome 2: Children are connected with and contribute to their world
- Outcome 4: Children are confident and involved learners
- Outcome 5: Children are effective communicators

Links to the Australian Curriculum

Science

Science Understanding

Biological Sciences

- Living things can be grouped on the basis of observable features and can be distinguished from non-living things (Yr 3 ACSSU044)
- Living things depend on each other and the environment to survive (Yr 4 ACSSU073)
- Living things have structural features and adaptations that help them to survive in their environment (Yr 5 ACSSU043)
- The growth and survival of living things are affected by physical conditions of their environment (Yr 6 ACSSU094)
- Classification helps organise the diverse group of organisms (Yr 7 ACSSU111)
- Interactions between organisms, including the effects of human activities can be represented by food chains and food webs (Yr 7 ACSSU112)
- Multi-cellular organisms rely on coordinated and interdependent internal systems to respond to changes to their environment (Yr 9 ACSSU175)
- Ecosystems consist of communities of interdependent organisms and abiotic components of the environment; matter and energy flow through these systems (Yr 9 ACSSU176)

Chemical Sciences

- Different materials can be combined for a particular purpose (Yr 2 ACSSU031)
- Solids, liquids and gases have different observable properties and behave in different ways (Yr 5 ACSSU077)
- Changes to materials can be reversible or irreversible (Yr 6 ACSSU095)
- Different types of chemical reactions are used to produce a range of products and can occur at different rates (Yr 10 ACSSU187)

Earth and Space Sciences

- The Earth is part of a system of planets orbiting around a star (the sun) (Yr 5 ACSSU078)
- Sedimentary, igneous and metamorphic rocks contain minerals and are formed by processes that occur within Earth over a variety of timescales (Yr 8 ACSSU153)

World Science Festival Queensland Schools Day

QUEENSLAND
MUSEUM
NETWORK

PRESENTS



- The universe contains features including galaxies, stars and solar systems, and the Big Bang theory can be used to explain the origin of the universe (Yr 10 ACSSU188)
- Global systems, including the carbon cycle, rely on interactions involving the biosphere, lithosphere, hydrosphere and atmosphere (Yr 10 ACSSU189)

Physical Sciences

- Heat can be produced in many ways and can move from one object to another (Yr 3 ACSSU049)

Science as Human Endeavour

- Science involves observing, asking questions about, and describing changes in, objects and events (Yr 1 ACSHE013, Yr 2 ACSHE021, Yr 3 ACSHE034)
- People use science in their daily lives, including when caring for their environment and living things (Yr 1 ACSHE022, Yr 2 ACSHE035)
- Science involves making predictions and describing patterns and relationships (Yr 3 ACSHE050, Yr 4 ACSHE061, Yr 5 ACSHE081)
- Science knowledge helps people to understand the effect of their actions (Yr 3 ACSHE051, Yr 4 ACSHE062)
- Scientific knowledge is used to solve problems and inform personal and community decisions (Yr 5 ACSHE083)
- Scientific knowledge has changed peoples' understanding of the world and is refined as new evidence becomes available (Yr 8 ACSHE134)
- 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)
- Solutions to contemporary issues that are found using science and technology, may impact on other areas of society and may involve ethical considerations (Yr 8 ACSHE135)
- People use science understanding and skills in their occupations and these have influenced the development of practices in areas of human activity (Yr 8 ACSHE136)
- 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

- With guidance, plan and conduct scientific investigations to find answers to questions, considering the safe use of appropriate materials and equipment (Yr 3 ACSIS054, Yr 4 ACSIS065)

Digital Technologies

- Recognise and explore digital systems (hardware and software components) for a purpose (Foundation to Yr 2 ACTDIK001)
- Identify and explore a range of digital systems with peripheral devices for different purposes, and transmit different types of data (Yr 3-4 ACTDIK007)

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Mathematics

- Recognise and classify familiar two-dimensional shapes and three-dimensional objects using obvious features (Yr 1 ACMMG022)
- Describe the features of three-dimensional objects (Yr 2 ACMMG043)

Humanities and Social Sciences

Civics and Citizenship

- Reflect on their role as a citizen in Australia's democracy (Yr 7 ACHCS060)
- How citizens can participate in Australia's democracy, including use of the electoral system, contact with their elected representatives, use of lobby groups, and direct action (Yr 8 ACHCK062)

Inquiry and Skills

- Reflect on learning to propose actions in response to an issue or challenge and consider possible effects of proposed actions (Yr 4 ACHASSI081)

Historical Knowledge and Understanding

- Responses of governments, including the Australian Government, and international organisations to environmental threats since the 1960s, including deforestation and climate change (Yr 10 ACDSEH128)