

YEAR RECOMMENDATION: 9-12

Thursday, 22 March 2018

11.30 am-12.30 pm

FOR THE LOVE OF MATHS: More Than Just Numbers at the World Science Festival Brisbane can provide Year 9-12 with valuable curriculum links and a unique classroom learning experience.

The Queensland Museum acknowledges the expertise and support of the Department of Education in developing these curriculum links.

STEM is addressed in the Australian Curriculum through the learning areas of Science, Technologies and Mathematics, and through general capabilities, particularly Numeracy, Information and Communication Technology (ICT) capability, and Critical and Creative Thinking. STEM skills in the workplace are widely recognised as being crucial to our long-term future. The importance of establishing explicit connections for students between classroom learning in STEM, and future work and learning opportunities is imperative. (ACARA: STEM Connections Project, 2015). This session provides authentic opportunities for students to consider the connections between classroom learning and work opportunities in mathematics.

Year 9-12 Curriculum Links

Links with General Capabilities

NUMERACY

Students become numerate as they develop the knowledge and skills to use mathematics confidently across other learning areas at school and in their lives more broadly. Numeracy encompasses the knowledge, skills, behaviours and dispositions that students need to use mathematics in a wide range of situations. It involves students recognising and understanding the role of mathematics in the world and having the dispositions and capacities to use mathematical knowledge and skills purposefully.

Students have opportunities to transfer their mathematical knowledge and skills to contexts outside the mathematics classroom. These opportunities help students recognise the interconnected nature of mathematical knowledge, other learning areas and the wider world, and encourage them to use their mathematical skills broadly.

LITERACY

Grammar knowledge

Express opinion and point of view - use language that indirectly expresses opinions and constructs representations of people and events, and consider expressed and implied judgments

Information and Communication Technology (ICT) Capability

Identify the impacts of ICT in society - assess the impact of ICT in the workplace and in society, and speculate on its role in the future and how they can influence its use

Personal and Social Capability

Engage in science inquiry, learn how scientific knowledge informs and is applied in their daily lives, and explore how scientific debate provides a means of contributing to their communities.

Critical and creative thinking

Students pose questions and identify and clarify information and ideas, and then organise and process information. They use questioning to investigate and analyse ideas and issues, make sense of and assess information and ideas, and collect, compare and evaluate information from a range of sources.

STRATEGIC PARTNERS

ACADEMIC PARTNERS

STREET SCIENCE
PARTNER

PRESENTED BY



Year Level	Achievement Standard	Content descriptions	Curriculum into the Classroom
9 Science	... They describe social and technological factors that have influenced scientific developments and predict how future applications of science and technology may affect people's lives.	Science as a Human Endeavour 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 (ACSHE160)	Unit 3 It's elementary

Work studies

Year 9 & 10

The Australian Curriculum: Work Studies, Years 9–10 has been written in response to key work-related issues facing young people today and into the future. This is a world-leading, future-oriented curriculum, equal in quality, value and rigour to more traditional academic programs.

The Australian Curriculum: Work Studies, Years 9–10 aims to ensure that students in Years 9 and 10 develop:

- knowledge of the world of work and the importance of lifelong learning
- capacities to manage careers, change and transitions in an uncertain and changing future

Mathematics senior subjects

Year 11 & 12

There are three senior Mathematics Authority subjects, Mathematics A (2008), Mathematics B (2008 amended 2014) and Mathematics C (2008) and two senior Mathematics Authority-registered subjects (Functional Mathematics (2006) and Prevocational Mathematics (2004). E

Each of these subjects is a precursor to a variety of work pathways including further study and training in the technical trades or tertiary studies especially in areas such as science, medicine, mining and engineering, information technology, mathematics, finance, and business and economics. The course description for each subject explains the importance of studying senior mathematics for career and employment opportunities and well as how mathematics is embedded in our daily lives.

© Australian Curriculum, Assessment and Reporting Authority (ACARA) 2010 to present, unless otherwise indicated. This material was downloaded from the [Australian Curriculum](http://www.australiancurriculum.edu.au/) website

(<http://www.australiancurriculum.edu.au/>) (accessed 6 February 2016) and was not modified. The material is licensed under [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/). Version updates are tracked on the [Curriculum version history](#) page of the Australian Curriculum website.

ACARA does not endorse any product that uses the Australian Curriculum or make any representations as to the quality of such products. Any product that uses material published on this website should not be taken to be affiliated with ACARA or have the sponsorship or approval of ACARA. It is up to each person to make their own assessment of the product, taking into account matters including, but not limited to, the version number and the degree to which the materials align with the content descriptions (where relevant). Where there is a claim of alignment, it is important to check that the materials align with the content descriptions (endorsed by all education Ministers), not the elaborations (examples provided by ACARA).