

## Supporting your child with Science/STEM Learning

It was great to see so many parents and carers at our Open Evening last night. There were many questions relating to how you can support your child's interest in learning Science/STEM. While the focus of Science in a Primary School setting is to build and foster an enjoyment of Science through hands-on, interactive means, you may find the following resources helpful.

### [ICAS Science Assessment Framework](#)

For further information access the ICAS information page, which includes pricing, online practice tests and other resources for assessment preparation.

<https://www.icasassessments.com/>

### Example Questions for ICAS

While a general interest in Science is a wonderful opportunity to learn about the world and concepts relating to various fields of Science, the ICAS examinations are high level assessments aimed at gaining an awareness of various areas of understanding, general knowledge and inferential and interpreting skills. This makes studying for the examination tricky. Please see below some examples of questions from past tests covering an array of concepts including links to reading comprehension and mathematics/measurement.

Link- [Example ICAS Questions](#)

### **Victorian Curriculum Maps - Navigating and using the maps Year 3-8 Extension**

The maps indicate student conceptual development from foundation to year 8. The arrow on the left hand side of the map indicates increasing conceptual complexity.

#### **Maps – Forces and motion**

- [Laws of motion \(pdf - 121.66kb\)](#)
- [Waves \(pdf - 79.22kb\)](#)
- [Electricity and magnetism \(pdf - 70.55kb\)](#)
- [Energy transformations \(pdf - 77.76kb\)](#)

## Maps – Living things

- [Cell functions \(pdf - 66.36kb\)](#)
- [Cells and organs \(pdf - 71.86kb\)](#)
- [Natural selection \(pdf - 61.95kb\)](#)
- [Biological evolution \(pdf - 51.47kb\)](#)
- [DNA and inherited characteristics \(pdf - 64.33kb\)](#)
- [Variation in inherited characteristics \(pdf - 65.53kb\)](#)
- [Flow of energy in ecosystems \(pdf - 99kb\)](#)
- [Flow of matter in ecosystems \(pdf - 74.26kb\)](#)

## Maps – Structure of matter

- [Atoms and molecules \(pdf - 99.01kb\)](#)
- [Conservation of matter \(pdf - 72.43kb\)](#)
- [States of matter \(pdf - 66.77kb\)](#)
- [Chemical reactions \(pdf - 74.58kb\)](#)

## Maps – Earth and Space

- [Stars \(pdf - 93.2kb\)](#)
- [Solar system \(pdf - 67.57kb\)](#)
- [Gravity \(pdf - 64.57kb\)](#)
- [Changes in the Earth's surface \(pdf - 61.26kb\)](#)
- [Plate tectonics \(pdf - 54.49kb\)](#)

## Other Resources to Explore Science at Home

[ABC Education](#) brings together educational content to use at home and in the classroom. Its resources are free and mapped to the Australian Curriculum, covering Mathematics, Science and Technologies, including STEM.

The [GiST](#) provides resources to inspire and inform girls, schools and families in science, technology, engineering and maths (STEM). Explore activities, resources, case studies, lessons, study pathways and careers.

**Extension - Stile** - [Click here](#) - free lessons, resources, etc. Search by topic, year level. Linked to Australian Curriculum.

**Cool Australia** - [Click here](#) - free lessons, resources, etc. Search by topic

**National Geographic** - [Click here](#) - UK-based. Free resources, lesson plans, etc.