

# Maths Sites Worth Visiting

## ***Australian Curriculum: Mathematics focus sites include:***

<https://www.australiancurriculum.edu.au/f-10-curriculum/mathematics/> The source of Curriculum descriptions and sequence of learning per Year level.

Scoutle resources for Mathematics (P-10):

- quality assured, free resources linked directly to each strand within the Australian Curriculum Mathematics.

ABC Education: (P – 10) thousands of free educational learning resources, videos, games, multi-media digibooks and articles; all aligned with the Australian Curriculum:

Money Smart teaching resources (ASIC):

- Each unit of work and digital activity has an Australian Curriculum mapping document

ReSolve Searchable tasks (F-10) with a focus on reasoning and problem-solving

AAMT Top Drawer - <https://topdrawer.aamt.edu.au/> A resource with support for fractions; mental computation; geometric reasoning; patterns; reasoning; and statistics.

## ***National (Australian) Education resources:***

Victoria: FUSE Primary:

<https://fuse.education.vic.gov.au/ResourcePackage/LandingPage?objectId=9c94977a-b0ff-42a9-9170-313badf8d705&SearchScope=Primary>

FUSE Secondary: <https://fuse.education.vic.gov.au/VC/Secondary?mathematics>

South Australia: SA Teachers and Leaders Resource

The South Australian Teachers and Leaders Resource site has a great set of ideas and resources to look through - <https://acleadersresource.sa.edu.au/resources/working-with-curriculum/mathematics/>

NSW: Resources to support Stages 1 to 3 <https://education.nsw.gov.au/teaching-and-learning/curriculum/key-learning-areas/mathematics/Early-Stage-1-to-Stage-3/resources>

NSW: Resources to support Stages 4 and 5: <https://education.nsw.gov.au/teaching-and-learning/curriculum/key-learning-areas/mathematics/Stages-4-and-5/resources>

Queensland: The Queensland Curriculum and Assessment Authority provides a suite of resources to support teachers from Years P – 10 <https://www.qcaa.qld.edu.au/p-10/aciq/learning-areas/mathematics/teaching>

***International Sites with a broad spectrum of resources:***

NRICH (UK): (exceptional resources here)

- free online mathematics resources for ages covering all stages of schooling
- 'low threshold, high ceiling' activities focus on developing problem solving, and encourage exploration and discussion

NZ Maths <https://nzmaths.co.nz/> well organised and great source of problem solving

NCETM (National Centre for Excellence in the Teaching of Mathematics UK)  
<https://www.ncetm.org.uk/> excellent resources for teaching for mastery

NCTM Illuminations (US):

- online interactive resources for learners and educators to use; searchable and organised by year level and strand of Mathematics.

***Resources with engaging problem-solving and reasoning tasks using visual provocations***

**Which One Doesn't Belong** (US) sets of 4 visuals where the learner must give a reason why each doesn't belong to the set (P – 12)

**Would You Rather** (US) Choose between two provocations and decide mathematically which is best (P – 10)

**Open-Middle** (US) A series of searchable tasks in strands many using the 0 – 9 digits in challenges. All have multiple solutions. (K – 12)

**Convince Me That** (US) A series of powerpoint slides with a provocation per slide. (K – 10)

**Math Talks** (also includes Pattern Talks) A series of provocations with examples of students responses – some correct others with misconceptions – very good discussion starters (4 - 10)

**Same Surface, Different Deep Structure (SSDD)** (US) Searchable problems with a gentle entry problem and then associated more demanding aspects explored. (5 - 12)

**Math for Love** (US) Range of engaging challenges and many games based learning opportunities (K – 10)

**Visualpatterns.org** (US) A set of pattern growth problems great for thinking algebraically to continue patterns and find rules (K – 10)

**Estimation 180** Activities to support measurement estimation

**Think Mathematically** Mark Chubb great sets of ideas and activities

### ***Technology Focussed Sites***

Desmos significant resources and access to powerful graphing software

Geogebra graphing capabilities and many dynamic simulations

Casio calculator technology and classroom resources

Texas Instruments lots of teacher and student support

Virtual Manipulatives:

Dice (4-sided to 20-sided) <http://a.teall.info/dice/>

Pattern Blocks <https://apps.mathlearningcenter.org/pattern-shapes/>

Spinners (NRich <https://nrich.maths.org/6717>) NCTM (<https://www.nctm.org/adjustablespinner/>)

Coin Toss <https://www.random.org/coins/>

Playing Cards <https://www.random.org/playing-cards/?cards=5&decks=1&spades=on&hearts=on&diamonds=on&clubs=on&aces=on&twos=on&threes=on&fours=on&fives=on&sixes=on&sevens=on&eights=on&nines=on&tens=on&remaining=on>

Isometric Drawing Tool: NCTM <https://www.nctm.org/Classroom-Resources/Illuminations/Interactives/Isometric-Drawing-Tool/>

Large collection of tools from Toy Theatre <https://toytheater.com/category/teacher-tools/virtual-manipulatives/>

### ***Subscription Required Sites (Fees required)***

Maths 300 excellent set of stimulating lessons worth talking about! Annual fee required. Australian made. <https://maths300.com/>

Mathematics Task Centre from the developers of many of the Maths 300 suite a further set of tasks available with subscription.

### ***Sites with Tasks and Philosophy***

Youcubed (US) home of Jo Boaler and a Maths growth mindset. Many engaging tasks organised in Year levels. (P – 10)

Math for Love (US) Range of engaging challenges and many games based learning opportunities (K – 10)

Mathematics Task Centre: [Maths at Home Support](#) great site developed to support home learning from the people who brought us Maths 300 – Doug Williams and Charlie Lovatt. Maths At Home Support opens up free tasks from the extensive Mathematics Task Centre Suite.

Dr Paul Swan (WA Maths Educator)-lots of really good games and activities

<https://drpaulswan.com.au/planning/>

<https://drpaulswan.com.au/product-category/games/>

<https://drpaulswan.com.au/number-resources/>

<https://drpaulswan.com.au/teaching-at-home/>

Peter Liljedahl – building thinking classrooms and using vertical whiteboards

***Extension and enrichment opportunities***

Australian Maths Trust AMT (AUS) The Sandpit is a set of challenging problems for Years 3 – 12 that are freely available as are some other resources from the AMT. Others, such as the Maths Challenge, Maths Enrichment or the annual Australian Mathematics Competition have a cost.