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.

[Scootle resources for Mathematics (P-10):](https://www.scootle.edu.au/ec/acSubject?name=%22Mathematics%22)

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

[ABC Education](https://education.abc.net.au/home#!/resources/-/mathematics): (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](https://www.moneysmart.gov.au/) (ASIC):

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

[ReSolve](https://www.resolve.edu.au/) 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](https://nrich.maths.org/) (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](https://illuminations.nctm.org/Search.aspx?view=search&type=ac) (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](http://wodb.ca/index.html) (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](http://www.wouldyourathermath.com/would-you-rather-38-2/) (US) Choose between two provocations and decide mathematically which is best (P – 10)

[Open-Middle](https://www.openmiddle.com/) (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](https://docs.google.com/presentation/d/1_kMfjsrEGWtNbWT-nwrzbfe5WB3C_u6vo3PvFquZA5I/edit#slide=id.g34d3ccf053_0_2697) (US) A series of powerpoint slides with a provocation per slide. (K – 10)

[Math Talks](http://www.mathtalks.net/nt-5-8.html) (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](https://ssddproblems.com/) (SSDD) (US) Searchable problems with a gentle entry problem and then associated more demanding aspects explored. (5 - 12)

[Math for Love](https://mathforlove.com/) (US) Range of engaging challenges and many games based learning opportunities (K – 10)

[Visualpatterns.org](http://www.visualpatterns.org/) (US) A set of pattern growth problems great for thinking algebraically to continue patterns and find rules (K – 10)

[Estimation 180](http://www.estimation180.com/) Activities to support measurement estimation

[Think Mathematically](https://buildingmathematicians.wordpress.com/author/markchubb3/)  Mark Chubb great sets of ideas and activities

***Technology Focussed Sites***

[Desmos](https://www.desmos.com/calculator) significant resources and access to powerful graphing software

[Geogebra](https://www.geogebra.org/?lang=en-AU) graphing capabilities and many dynamic simulations

[Casio](http://www.casio.edu.shriro.com.au/) calculator technology and classroom resources

[Texas Instruments](https://education.ti.com/en-au) 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](http://mathematicscentre.com/taskcentre/) from the developers of many of the Maths 300 suite a further set of tasks available with subscription.

***Sites with Tasks and Philosophy***

[Youcubed](https://www.youcubed.org/) (US) home of Jo Boaler and a Maths growth mindset. Many engaging tasks organised in Year levels. (P – 10)

[Math for Love](https://mathforlove.com/) (US) Range of engaging challenges and many games based learning opportunities (K – 10)

Mathematics Task Centre: [Maths at Home Support](http://www.bom.gov.au/tas/forecasts/hobart.shtmlhttp%3A/www.mathematicscentre.com/news.htm) 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](http://www.peterliljedahl.com/) – building thinking classrooms and using vertical whiteboards

***Extension and enrichment opportunities***

[Australian Maths Trust](https://www.amt.edu.au/sandpit) 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.