



TILING CHALLENGE

Get your students ready for the Science Alive! **STEM Day Out Tiling Challenge**. Tiling is deceptively simple: putting geometric pieces together to make a square or a rectangle. This tiling challenge requires the student to complete a square with 14 given pieces as fast as they can.

At school activity

The purpose of this activity is to give students the opportunity to practice a tiling puzzle. Using the template below students can cut out the pieces and practice making the tiling puzzle. **This puzzle only has 11 pieces**, so the challenge puzzle will be more difficult, however this will hone their problem solving and creative thinking skills! You can build this puzzle in 110,000 ways, and 498 are shown. You can bet each time you put the pieces together again, it will be a different pattern.

Objectives:

- Utilise design and engineering process
- Encourage creativity, critical thinking and problem solving
- Apply science inquiry skills

What you will need:

- Template
- Scissors

Teacher materials:

You may want to get the students to watch this video for preparation:

<https://www.youtube.com/watch?v=DpWPyebIIMY&t=12s>

Tiling is one of many geometric puzzling activities that engage students of all ages in a fun and friendly way. For more inspirations of how to use tiling puzzles to enhance learning, please browse Mindsharp Creative Development YouTube Channel (kids-friendly):

https://www.youtube.com/channel/UCK1FzMeA7zBzNOLIQP4w_Uw/videos

Contact: uncrowd@uncrowd.net about loan sample sets for preparation.

Images



Curriculum Links:

Science

[Science Understanding - Year 7 Physical sciences](#)

Change to an object's motion is caused by unbalanced forces, including Earth's gravitational attraction, acting on the object

[Science Inquiry Skills - Years 4-7](#)

- Planning and conducting
- Processing and analysing data and information
- Evaluating
- Communicating

Mathematics

[Measurement and Geometry - Years 4-7](#)

