

Activity: SIGNS AND SYMBOLS

Strand: Space and Geometry

Stage: 2/3/4

Syllabus outcome: **SGS 2.2A** - manipulates, compares, sketches and names two-dimensional shapes and describes their features
SGS 3.2A – manipulates, classifies and draws 2D shapes and describes side and angle properties
SGS 4.2 – identifies and names angles formed by the intersection of straight lines, including those related to transversals on sets of parallel lines, and makes use of the relationships between them

Key ideas / Working Mathematically – Exploring some common symbols and properties of 2D shapes

Questioning: questioning properties that identify 2D shapes

Applying strategies: Discussion of properties and symbols in memory game

Communicating: Discussing, explaining and justifying which pairs of cards are the same and why

Reasoning: During the activity - discussing, explaining and justifying which pairs of cards are the same and why

Reflecting: Checking, justifying and modifying decisions

Literacy / Numeracy: -Increased confidence in students' understanding and usage of terms related to properties of 2D shapes and symbols used when drawing them
 - Increased confidence in describing and justifying mathematical ideas
 - Increased familiarity with 2D shapes in our environment

Curriculum differentiation: Weaker students can do this as a card-matching activity so they can view the cards face up, while the stronger students can play this as a memory game and time themselves.

Quality teaching:	<i>Intellectual Quality</i>		<i>Quality Learning Environment</i>		<i>Significance</i>	
	Deep Knowledge		Explicit Quality Criteria	X	Background Knowledge	X
Deep Understanding		Engagement	X	Cultural Knowledge		
Problematic Knowledge		High Expectations	X	Knowledge Integration	X	
Higher-order Thinking		Social Support	X	Inclusivity	X	
Metalanguage	X	Students' Self-regulation	X	Connectedness		
Substantive Communication	X	Student Direction	X	Narrative		
Learning styles:	Visual	X	Auditory	X	Kinaesthetic	X

Lesson outline:

- Introduce lesson by showing shapes on overhead, discussing their properties and how they are represented in drawings
- Memory game - students play memory game, matching cards relating shapes, their properties and symbols used when drawing them
- Reflect on lesson.