

# Overview of cognitive verbs in the Australian Curriculum v9.0

## Mathematics

This overview maps the common cognitive verbs used across the Australian Curriculum v9.0: Mathematics. The cognitive verbs are categorised using Marzano and Kendall's (2007) four elements of the cognitive system: retrieval, comprehension, analysis and knowledge utilisation. When brackets are used, this indicates a cognition used in Mathematics that aligns to a common cognition. For the full list of common cognitive verbs, refer to the Categories of common cognitive verbs at [www.qcaa.qld.edu.au](http://www.qcaa.qld.edu.au).

Key: AS = Achievement standard CD = Content description.

Cognitive process*	Cognitive verb	Prep	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Retrieval	Demonstrate	CD	AS	AS CD	CD	CD			CD			
	Identify	AS CD	AS CD	AS CD	AS CD	AS CD	AS CD	AS CD	AS CD	AS CD	CD	AS CD
	Identify (Quantify)		AS CD									
	Recall			AS CD	AS CD	CD						
	Recall (Name)	AS CD				CD						
	Recognise	CD	CD	CD	CD	AS CD	CD	CD	CD		AS CD	AS CD
	Recognise (Measure)		AS CD	CD		AS CD	AS CD		CD	AS CD		
	Select									CD		

Cognitive process*	Cognitive verb	Prep	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	Select (Choose)			AS CD	CD	AS CD	AS CD	CD	AS	CD	AS CD	CD
	Select (acquire)		CD	CD	CD	CD	CD		CD			
	Select (collect)			AS	CD	CD	AS CD	CD				
	Select (record)			AS	AS CD	CD	CD	AS				
	Select (Order)	CD	AS CD	AS CD	AS CD	AS CD	AS CD	AS CD	CD			
	Select (Sequence)	AS CD										
	Select (Sort)	AS CD		CD					AS CD			
	Use	AS CD	AS CD	AS CD	AS CD	AS CD	AS CD	AS CD	AS CD	AS CD	AS CD	AS CD
Comprehension	Communicate	CD	AS CD	CD	CD	AS CD	CD	CD	CD	CD	AS	CD
	Communicate (Comment on)										AS	AS CD
	Communicate (Express)						AS CD				AS	
	Describe	AS CD	CD	AS CD	AS CD	AS CD	AS CD	CD	AS CD	AS CD	AS CD	AS CD

Cognitive process*	Cognitive verb	Prep	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	Explain	CD			AS CD	CD	AS CD	AS CD	AS CD	AS CD	AS CD	
	Model				AS							
	Represent	AS CD	CD	AS CD	AS CD	AS CD	AS CD	AS CD	AS CD	AS	AS CD	AS CD
Analysis	Analyse					CD		CD	CD	AS CD	AS CD	AS CD
	Apply			AS CD	AS CD	CD	AS CD	CD	AS CD	AS CD	AS CD	AS CD
	Classify		AS CD	AS CD	AS CD				AS CD			
	Compare	AS CD	AS CD	AS CD	AS CD	AS CD	AS CD	AS CD	CD	AS CD	AS CD	AS CD
	Connect	AS CD	AS				AS CD	AS				
	Connect (make connections/ make comparisons)	AS					AS CD	AS			AS	
	Consider										AS	
	Critique								AS CD			

Cognitive process*	Cognitive verb	Prep	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	Examine											
	Identify				AS CD	AS CD	AS CD		AS CD	AS CD	CD	
	Infer											
	Infer (make inferences)									CD		
	Interpret			AS CD	AS CD	AS CD	AS CD	AS CD	AS CD	AS CD	AS CD	AS CD
	Reflect on											
Knowledge utilisation	Conduct				AS CD	AS CD	AS CD	AS CD	AS CD	AS CD	AS CD	AS CD
	Create	AS CD	AS CD	CD	AS CD	AS CD	AS CD	AS CD	AS CD	AS CD		
	Create (Build)						CD					
	Create (Construct)						AS CD					CD
	Create (Make)		AS CD		AS CD					AS CD		
	Decide								AS			

Cognitive process*	Cognitive verb	Prep	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	Decide (make decisions)								CD			
	Determine			AS CD	AS CD	AS	CD	CD	CD	AS CD	AS	
	Determine (Calculate)								CD	CD	CD	
	Develop			CD	CD	CD	CD					
	Develop (Design)								CD	CD	AS CD	AS CD
	Develop (Generate)					AS CD		AS CD	CD			
	Discuss		AS CD		AS CD	AS CD	CD	CD	CD		CD	AS CD
	Elaborate (Expand)									AS CD	AS CD	
	Evaluate										AS CD	AS CD
	Evaluate (Review)									AS CD		
	Investigate				AS CD					CD		
	Justify							AS CD	AS CD		CD	AS CD

Cognitive process*	Cognitive verb	Prep	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	Justify (Give/ demonstrate/ communicate reasoning)	AS CD	AS CD						AS CD	CD		
	Justify (Validate)						CD					
	Predict								AS CD			
	Predict (Approximate)					AS CD		CD				
	Predict (Estimate/make estimates)				AS CD	CD	AS CD				CD	
	Propose (make and test conjectures)									AS		AS
	Solve		AS CD	AS CD	AS CD	AS CD	AS CD	AS CD	AS CD	AS CD	AS CD	AS CD

\*Marzano, R & Kendall J 2007, *The New Taxonomy of Educational Objectives*, Corwin Press, Thousand Oaks, CA.

## References

Marzano, R & Kendall, J 2007, *The New Taxonomy of Educational Objectives*, Corwin Press, Thousand Oaks, CA.

## More information

This information sheet is part of a suite of resources to support teachers in the explicit teaching and assessment of students' thinking. The suite of resources includes categories of common cognitive verbs, cognitive verb overviews and a cognitive verb toolkit with information sheets, posters and graphic organisers.

If you would like more information, please visit the QCAA website [www.qcaa.qld.edu.au](http://www.qcaa.qld.edu.au) and search for 'cognitive verbs'. Alternatively, the suite of resources can be found here: [www.qcaa.qld.edu.au/p-10/aciq/version-9/cognitive-verbs-in-version-9.0](http://www.qcaa.qld.edu.au/p-10/aciq/version-9/cognitive-verbs-in-version-9.0).



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