

Foundation to Level 2

Levels 3 and 4

Levels 5 and 6

Levels 7 and 8

Levels 9 and 10

Questions and Possibilities				
Identify, describe and use different kinds of question stems to gather information and ideas	Construct and use open and closed questions for different purposes	Examine how different kinds of questions can be used to identify and clarify information, ideas and possibilities	Consider how to approach and use questions that have different elements, including factual, temporal and conceptual elements	Investigate the characteristics of effective questions in different contexts to examine information and test possibilities
Consider personal reactions to situations or problems and how these reactions may influence thinking	Explore reactions to a given situation or problem and consider the effect of pre-established preferences	Experiment with alternative ideas and actions by setting preconceptions to one side	Suspend judgements temporarily and consider how preconceptions may limit ideas and alternatives	Suspend judgements to allow new possibilities to emerge and investigate how this can broaden ideas and solutions
Make simple modifications to known ideas and routine solutions to generate some different ideas and possibilities	Investigate different techniques to sort facts and extend known ideas to generate novel and imaginative ideas	Identify and form links and patterns from multiple information sources to generate non-routine ideas and possibilities	Synthesise information from multiple sources and use lateral thinking techniques to draw parallels between known and new solutions and ideas when creating original proposals and artefacts	Challenge previously held assumptions and create new links, proposals and artefacts by investigating ideas that provoke shifts in perspectives and cross boundaries to generate ideas and solutions
Reasoning				
Examine words that show reasons and words that show conclusions	Examine and use the structure of a basic argument, with an aim, reasons and conclusion to present a point of view	Investigate common reasoning errors including contradiction and inconsistency, and the influence of context	Examine common reasoning errors including circular arguments and cause and effect fallacies	Examine a range of rhetorical devices and reasoning errors, including false dichotomies and begging the question
Compare and contrast information and ideas in own and others reasoning	Distinguish between main and peripheral ideas in own and others information and points of view	Consider the importance of giving reasons and evidence and how the strength of these can be evaluated	Investigate the difference between a description, an explanation and a correlation and scepticism about cause and effect	Examine how to identify and analyse suppressed premises and assumptions
Consider how reasons and examples are used to support a point of view and illustrate meaning	Investigate why and when the consequences of a point of view should be considered	Consider when analogies might be used in expressing a point of view and how they should be expressed and evaluated	Investigate when counter examples might be used in expressing a point of view	Investigate the nature and use of counter examples structured as arguments
	Identify and use 'If, then...' and 'what if...' reasoning	Examine the difference between valid and sound arguments and between inductive and deductive reasoning, and their degrees of certainty	Consider how to settle matters of fact and matters of value and the degree of confidence in the conclusions	Consider ambiguity and equivocation and how they affect the strength of arguments
	Explore distinctions when organising and sorting information and ideas from a range of sources	Explore what a criterion is, different kinds of criteria, and how to select appropriate criteria for the purposes of filtering information and ideas	Examine how to select appropriate criteria and how criteria are used in clarifying and challenging arguments and ideas	Investigate use of additional or refined criteria when application of original criteria does not produce a clear conclusion
Meta-Cognition				
Consider ways to express and describe thinking activity, including the expression of feelings about learning, both to others and self	Consider concrete and pictorial models to facilitate thinking, including a range of visualisation strategies	Investigate thinking processes using visual models and language strategies	Consider a range of strategies to represent ideas and explain and justify thinking processes to others	Critically examine their own and others thinking processes and discuss factors that influence thinking, including cognitive biases
Explore some learning strategies, including planning, repetition, rewording, memorisation, and use of mnemonics	Examine an increased range of learning strategies, including visualisation, note-taking, peer instruction and incubation, and reflect on how these can be applied to different tasks to reach a goal	Examine learning strategies, including constructing analogies, visualising ideas, summarising and paraphrasing information and reflect on the application of these strategies in different situations	Examine a range of learning strategies and how to select strategies that best meet the requirements of a task	Investigate how the use of a range of learning strategies can be monitored, evaluated and re-directed as necessary
Investigate ways to problem-solve, using egocentric and experiential language	Investigate a range of problem-solving strategies, including brainstorming, identifying, comparing and selecting options, and developing and testing hypotheses	Investigate how ideas and problems can be disaggregated into smaller elements or ideas, how criteria can be used to identify gaps in existing knowledge, and assess and test ideas and proposals	Consider how problems can be segmented into discrete stages, new knowledge synthesised during problem-solving and criteria used to assess emerging ideas and proposals	Investigate the kind of criteria that can be used to rationally evaluate the quality of ideas and proposals, including the qualities of viability and workability
Achievement Standard				
By the end of Level 2, students use and give examples of different kinds of questions. Students generate ideas that are new to them and make choices after considering personal preferences. Students identify words that indicate components of a point of view. They use reasons and examples for different purposes. Students express and describe thinking activity. They practice some learning strategies. Students demonstrate and articulate some problem-solving approaches.	By the end of Level 4, students explain how to construct open and closed questions and use them for different purposes. Students select and apply techniques to generate a range of ideas that extend how problems are solved. Students describe and structure arguments with clearly identified aims, premises and conclusions. They use and explain a range of strategies to develop their arguments. They identify the need to make distinctions and apply strategies to make these. Students use concrete and pictorial models to facilitate thinking, including a range of visualisation strategies. They practice and apply an increased range of learning strategies, including visualisation, note-taking, peer instruction and incubation. Students select and apply a range of problem-solving strategies.	By the end of Level 6, students apply questioning as a tool to focus or expand thinking. They use appropriate techniques to copy, borrow and compare aspects of existing solutions in order to identify relationships and apply these to new situations. Students distinguish between valid and sound arguments and between deductive and inductive reasoning. They explain how reasons and evidence can be evaluated. They explain and apply basic techniques to construct valid arguments and test the strength of arguments. Students represent thinking processes using visual models and language. They practice and apply learning strategies, including constructing analogies, visualising ideas, summarising and paraphrasing information. Students disaggregate ideas and problems into smaller elements or ideas, develop criteria to assess and test thinking, and identify and seek out new relevant information as required.	By the end of Level 8, students prioritise the elements of a question and justify their selection. Students demonstrate flexibility in thinking by using a range of techniques in order to repurpose existing ideas or solutions to meet needs in new contexts. Students explain different ways to settle matters of fact and matters of value and issues concerned with these. They explain and apply a range of techniques to test the strength of arguments. Students use a range of strategies to represent ideas and explain and justify thinking processes to others. They evaluate the effectiveness of a range of learning strategies and select strategies that best meet the requirements of a task. Students independently segment problems into discrete stages, synthesise new knowledge at intermediate stages during problem-solving and develop and apply criteria to assess ideas, proposals and emerging thinking.	By the end of Level 10, students construct and evaluate questions, including their own, for their effectiveness. They demonstrate a willingness to shift their perspective when generating ideas, resulting in new ways of perceiving solutions. Students structure complex valid arguments. They explain and apply a range of techniques to test validity within and between arguments. Students identify, articulate, analyse and reflect on their own and others thinking processes. They use, monitor, evaluate and redirect as necessary a range of learning strategies. Students develop, justify and refine criteria to evaluate the quality of ideas, proposals and thinking processes.