

## iMaths 5 Problem Solving reference sheet

This reference sheet lists the Topics from iMaths 5 that include a Problem Solving task and the strategies used to solve them. The grid shows the suggested key strategy as well as other strategies that students might use to solve the task.

### Key:

- Key strategies used to solve the task
- Supporting strategies used to solve the task

### NA2 Factor trees

1	Guess and check	6	Check for relevant or irrelevant information
2	Make a table or chart	7	Find smaller parts of a large problem
3	Draw a picture or diagram	8	Make an organised list
4	Act out the problem	9	Solve a simpler problem
5	Find a pattern or use a rule	10	Work backwards

### NA5 Place value beyond millions

1	Guess and check	6	Check for relevant or irrelevant information
2	Make a table or chart	7	Find smaller parts of a large problem
3	Draw a picture or diagram	8	Make an organised list
4	Act out the problem	9	Solve a simpler problem
5	Find a pattern or use a rule	10	Work backwards

### NA7 Multiplication 3-digit x 2-digit

1	Guess and check	6	Check for relevant or irrelevant information
2	Make a table or chart	7	Find smaller parts of a large problem
3	Draw a picture or diagram	8	Make an organised list
4	Act out the problem	9	Solve a simpler problem
5	Find a pattern or use a rule	10	Work backwards

### NA9 Division 3-digit ÷ 1-digit

1	Guess and check	6	Check for relevant or irrelevant information
2	Make a table or chart	7	Find smaller parts of a large problem
3	Draw a picture or diagram	8	Make an organised list
4	Act out the problem	9	Solve a simpler problem
5	Find a pattern or use a rule	10	Work backwards

### NA11 Division with remainders

1	Guess and check	6	Check for relevant or irrelevant information
2	Make a table or chart	7	Find smaller parts of a large problem
3	Draw a picture or diagram	8	Make an organised list
4	Act out the problem	9	Solve a simpler problem
5	Find a pattern or use a rule	10	Work backwards

### NA13 Equivalent fractions

1	Guess and check	6	Check for relevant or irrelevant information
2	Make a table or chart	7	Find smaller parts of a large problem
3	Draw a picture or diagram	8	Make an organised list
4	Act out the problem	9	Solve a simpler problem
5	Find a pattern or use a rule	10	Work backwards

**NA17** Expanded notation

1	Guess and check	6	Check for relevant or irrelevant information
2	Make a table or chart	7	Find smaller parts of a large problem
3	Draw a picture or diagram	8	Make an organised list
4	Act out the problem	9	Solve a simpler problem
5	Find a pattern or use a rule	10	Work backwards

**NA18** Decimal addition to tenths

1	Guess and check	6	Check for relevant or irrelevant information
2	Make a table or chart	7	Find smaller parts of a large problem
3	Draw a picture or diagram	8	Make an organised list
4	Act out the problem	9	Solve a simpler problem
5	Find a pattern or use a rule	10	Work backwards

**NA20** Decimal subtraction to tenths

1	Guess and check	6	Check for relevant or irrelevant information
2	Make a table or chart	7	Find smaller parts of a large problem
3	Draw a picture or diagram	8	Make an organised list
4	Act out the problem	9	Solve a simpler problem
5	Find a pattern or use a rule	10	Work backwards

**NA22** Percentages

1	Guess and check	6	Check for relevant or irrelevant information
2	Make a table or chart	7	Find smaller parts of a large problem
3	Draw a picture or diagram	8	Make an organised list
4	Act out the problem	9	Solve a simpler problem
5	Find a pattern or use a rule	10	Work backwards

**MG4** Perimeter of rectangles**PS task 1** Anika's Animal Nursery

1	Guess and check	6	Check for relevant or irrelevant information
2	Make a table or chart	7	Find smaller parts of a large problem
3	Draw a picture or diagram	8	Make an organised list
4	Act out the problem	9	Solve a simpler problem
5	Find a pattern or use a rule	10	Work backwards

**MG4** Perimeter of rectangles**PS task 2** Soccer field

1	Guess and check	6	Check for relevant or irrelevant information
2	Make a table or chart	7	Find smaller parts of a large problem
3	Draw a picture or diagram	8	Make an organised list
4	Act out the problem	9	Solve a simpler problem
5	Find a pattern or use a rule	10	Work backwards

**MG7** Read and interpret timetables

1	Guess and check	6	Check for relevant or irrelevant information
2	Make a table or chart	7	Find smaller parts of a large problem
3	Draw a picture or diagram	8	Make an organised list
4	Act out the problem	9	Solve a simpler problem
5	Find a pattern or use a rule	10	Work backwards

**MG8** Australian time zones

1	Guess and check	6	Check for relevant or irrelevant information
2	Make a table or chart	7	Find smaller parts of a large problem
3	Draw a picture or diagram	8	Make an organised list
4	Act out the problem	9	Solve a simpler problem
5	Find a pattern or use a rule	10	Work backwards

**MG14** Directions, turns and degrees

1	Guess and check	6	Check for relevant or irrelevant information
2	Make a table or chart	7	Find smaller parts of a large problem
3	Draw a picture or diagram	8	Make an organised list
4	Act out the problem	9	Solve a simpler problem
5	Find a pattern or use a rule	10	Work backwards

**MG17** Flip, slide, turn

1	Guess and check	6	Check for relevant or irrelevant information
2	Make a table or chart	7	Find smaller parts of a large problem
3	Draw a picture or diagram	8	Make an organised list
4	Act out the problem	9	Solve a simpler problem
5	Find a pattern or use a rule	10	Work backwards