

How to use Maths Mate Skill Builder

1. Determine which Maths Mate questions pose a difficulty

If a student gets one or more incorrect answers, represented by one or more successive unshaded boxes on their worksheet results sheet, then that question requires a Skill Builder.

For example, question 13 in Sheets 1, 2, 3 and 4 is not shaded, so Skill 13.1 from Skill Builder 13 needs to be handed to the student.

2. Find the relevant Skill Builder on the Maths Mate worksheet results sheet

Check across the question that is posing difficulties on the worksheet results sheet to find the list of skills within the Skill Builder that are most relevant to that question.

Obtain a copy of one or all of the skills listed for that question (pages 1 to 140). You can also double check with the grid at the right of each skill title, that the chosen skill is appropriate.




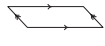



Remember, students should work through the skills in order. The skills where possible are arranged in increasing degree of difficulty.

Be aware that some skills may require the knowledge of previous skills, so when a student has several areas of weakness, they should work on the lowest numbered skill builders first. For example, a student struggling with Q10 and Q12 will need to build skills required for Q10 before they can improve Q12.

3. Look up any unknown terms in the Skill Builder glossary

The glossary (pages 141 to 168) is more than just a list of definitions. It contains a wealth of relevant information that may help the students to better understand the question at hand. Weaker students may find that referring to a copy of the glossary, and even building on it, is a helpful strategy for improving their overall mathematical competency.

For example, a student might need to look up the word “operation” before attempting to complete Skill 13.1

operation	• A mathematical process performed according to certain rules.	There are four basic operations in arithmetic: addition $3 + 12$ subtraction $3 - 1$ multiplication 1×5 division $6 \div 3$	ad - do
opposite	• The equivalent position but on the other side.	The opposite: left/right $+4/-4$	
order	• Placing a group in a special arrangement.	The aliens are arranged in order of height. 	
order of operations	• The order of doing operations. 1) Simplify inside all brackets. 2) Calculate \times and \div from left to right. 3) Calculate $+$ and $-$ from left to right.	Calculate $4 + 3 \times (6 - 2)$ by: 1) $1) = 4 + 3 \times 4$ 2) $2) = 4 + 12$ 3) $3) = 16$	
ordinal numbers	• A whole number that shows position.	1st, 2nd, 3rd, 4th, 5th... are ordinal numbers.	
orientation	• Position relative to direction.	The tornado is coming from the west. 	
outcome	• Result.	The outcome (result) of 2×4 is 8	
pair	• Two together.		
parallelogram	• A special quadrilateral. Opposite sides are parallel lines. Opposite sides are equal in length.		
pattern	• Numbers or objects that are arranged following a rule.		
penta	• Prefix meaning five.	See pentagon	
pentagon	• A polygon with 5 sides.	 Pentagon  Regular pentagon	

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© Maths Mate 5/6 Skill Builder Glossary

4. Complete the relevant Skill Builder

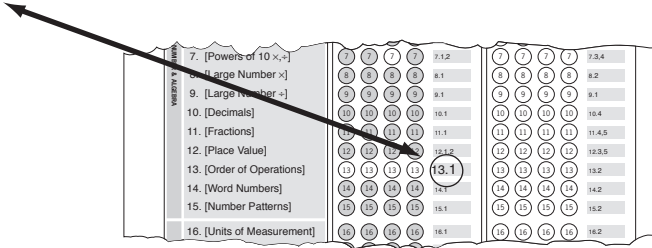
Work through the examples given for that skill, and complete the exercises.

There are many techniques or methods that can be used to teach the same basic skills, even something as simple as adding 7 and 9. It is good for a student to be given a range of alternatives appropriate for each skill but space restrictions make this impossible. These sheets often suggest an approach that may be different to a student's past experience. If a student feels more comfortable with his current technique, that is fine. In most cases it is the end result that counts.

It is possible to take a very weak student back to a Skill Builder from a lower level if this is necessary. It is also possible to use a higher level book for students to have further practice if required.

5. Correct the relevant Skill Builders from the Skill Builder answer sheets (from page 173)

6. Circle the completed skill numbers on the Maths Mate worksheet results sheet



7. [Powers of 10 \times, \div]	7.1	7.2	7.3	7.4
8. [Large Number \times]	8.1	8.2	8.3	8.4
9. [Large Number \div]	9.1	9.2	9.3	9.4
10. [Decimals]	10.1	10.2	10.3	10.4
11. [Fractions]	11.1	11.2	11.3	11.4,5
12. [Place Value]	12.1	12.2	12.3	12.3,5
13. [Order of Operations]	13.1	13.2	13.3	13.2
14. [Word Numbers]	14.1	14.2	14.3	14.2
15. [Number Patterns]	15.1	15.2	15.3	15.2
16. [Units of Measurement]	16.1	16.2	16.3	16.2

7. Go back and repeat previous Maths Mate questions

After completing a Skill Builder, students should be encouraged to go back and attempt again those particular questions on the recently completed Maths Mate homework sheets.