



Makes Maths Fun

# Level 7

ADDITION & SUBTRACTION

Bloomsmath is a comprehensive mathematics program which provides a fun way for every student to be learning to the best of their ability.

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## Addition & Subtraction

Level 7 is designed for students in their seventh year at school often called Year 6. Students will select and apply appropriate strategies for addition and subtraction with counting numbers of any size.

**Knowledge:** Students will play skittles to create addition algorithms.



Students who demonstrate proficiency in this activity move on to Comprehension.



Students stop here as they require additional teacher support to master this activity.

**Comprehension:** Students will solve an addition and subtraction based cross-number.



Students who demonstrate proficiency in this activity move on to Application.



Students stop here if time has run out or they require additional support with this activity.

**Application:** Students will manipulate numbers to complete "Number Sentence Maker".



Students who demonstrate proficiency in this activity move on to Analysis.



Students stop here if time has run out or they require additional support with this activity.

**Analysis:** Students will use dominoes to make all 4 sides equal a given amount.



Students who demonstrate proficiency in this activity move on to Synthesis.



Students stop here if time has run out or they require additional support with this activity.

**Synthesis:** Students will use given dominoes to make all 4 sides and diagonals equal.

**Evaluation:** Suggested questions provide a starting point for discussions related to Addition and Subtraction



Students may complete more or fewer activities for each learning outcome depending on the time allocated and their strength in the area being covered.



All students should participate in the Evaluation discussion to encourage the use of mathematical language, logical reasoning and reflection on that which they have completed.

Name: \_\_\_\_\_

# Knowledge

In this activity you will knock down skittles to create addition algorithms.

## Each Team of 4 Will Need:

- 🔥 6 skittles or coloured bottles with different numbers on the front of them.
- 🔥 A tennis ball.
- 🔥 A recording sheet and pencil.

## Activity:

1. Stand with your team's recording sheet and tennis ball at least 5 metres from your 6 skittles.
2. The first player in your team has 2 attempts to bowl the ball to knock down as many skittles as they can.
3. Skittles which are knocked over are added together on your team's recording sheet to create that player's score.
4. The first player returns the skittles to their original position and remaining players take it in turn to attempt to bowl the skittles and add up their score. The player with the highest score after 3 rounds wins.

Round 1	Student 1	Student 2	Student 3	Student 4	Student 5
Numbers Hit	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____
	_____ +	_____ +	_____ +	_____ +	_____ +
	_____	_____	_____	_____	_____
Score	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Round 2	Student 1	Student 2	Student 3	Student 4	Student 5
Numbers Hit	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____
	_____ +	_____ +	_____ +	_____ +	_____ +
	_____	_____	_____	_____	_____
Score	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Total Score:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
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Let's Try This Again



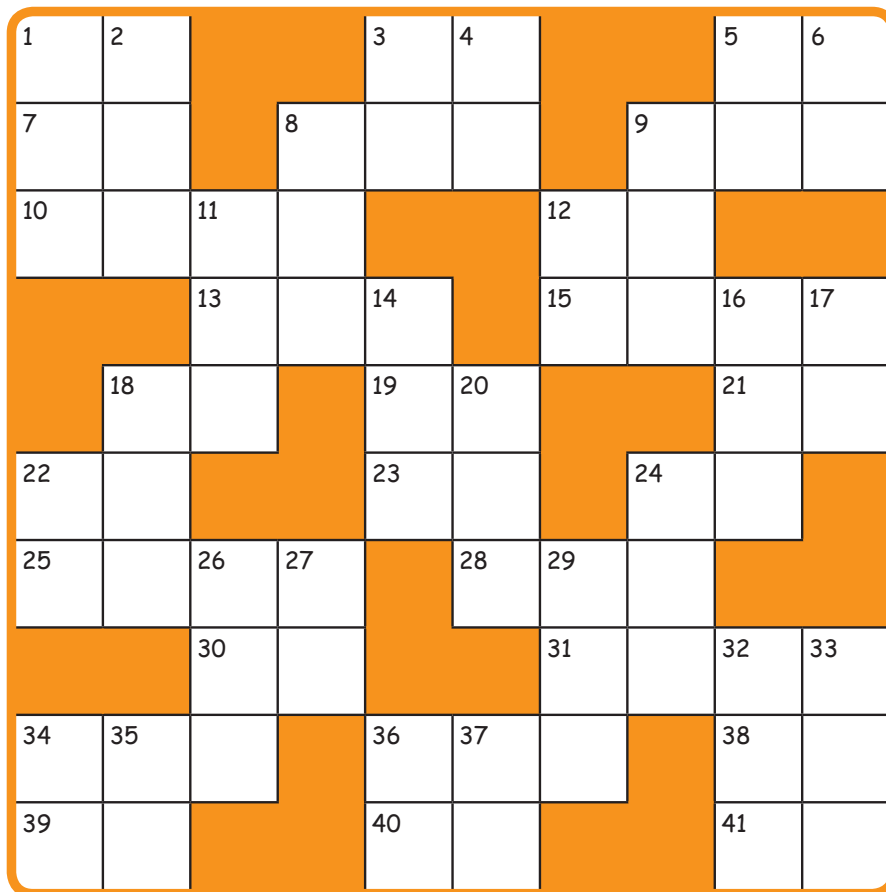
Progress To Comprehension

Name: \_\_\_\_\_

# Comprehension

Solve each algorithm to complete the cross-number below.

This is a tricky crossword and some clues will need to be solved before others. For example to solve **1 across** you will first need to solve **18 across**



## ACROSS

- 1. 19 + 18 across
- 3. 61 + 22 down
- 5. 7 across - 21
- 7. 122 - 35
- 8. 721 + 78
- 9. 13 across - 278
- 10. 5,205 + 1,338
- 12. 113 - 51
- 13. 17 down + 677
- 15. 2,146 + 1,212
- 18. 58 - 26
- 19. 36 down - 6
- 21. 72 - 25
- 22. 58 - 22
- 23. 127 - 36
- 24. 19 + 5 across
- 25. 4,463 + 14 down
- 28. 483 + 283
- 30. 17 + 20
- 31. 9,036 + 22 across
- 34. 445 - 211
- 36. 481 - 84
- 38. 14 down - 383
- 39. 66 - 15
- 40. 39 + 10
- 41. 25 + 9

## DOWN

- 1. 352 + 34 across
- 2. 292 - 117
- 3. 70 + 29
- 4. 12 + 21 across
- 5. 114 - 46
- 6. 22 across + 30
- 8. 1,448 - 712
- 9. 336 + 7 across
- 11. 199 + 273
- 12. 28 + 35
- 14. 302 + 127
- 16. 3 across + 450
- 17. 170 - 83
- 18. 252 + 116
- 20. 599 + 218
- 22. 65 - 31
- 24. 655 + 205
- 26. 847 + 7 across
- 27. 30 across - 10
- 29. 405 + 292
- 32. 1,082 - 339
- 33. 135 + 129
- 34. 32 down - 718
- 35. 12 down - 32
- 36. 29 down - 663
- 37. 79 + 20



Let's Try This Again



Progress To Application

Name: \_\_\_\_\_

# Application

## Number Sentence Maker

Use the numbers 1, 2, 3, and 4 plus +, -, x and ÷ to create number sentences for each of the following - two have been done for you as examples.

1)	4	-	2	-	1	= 1
2)	_____		_____		_____	= 2
3)	_____		_____		_____	= 3
4)	_____		_____		_____	= 4
5)	_____		_____		_____	= 5
6)	_____		_____		_____	= 6
7)	_____		_____		_____	= 7
8)	_____		_____		_____	= 8
9)	_____		_____		_____	= 9
10)	_____		_____		_____	= 10
11)	_____		_____		_____	= 11
12)	_____		_____		_____	= 12
13)	_____		_____		_____	= 13
14)	_____		_____		_____	= 14
15)	_____		_____		_____	= 15
16)	_____		_____		_____	= 16
17)	_____		_____		_____	= 17
18)	_____		_____		_____	= 18
19)	_____		_____		_____	= 19
20)	_____		_____		_____	= 20
21)	_____		_____		_____	= 21
22)	_____		_____		_____	= 22
23)	_____		_____		_____	= 23
24)	_____		_____		_____	= 24
25)	_____		_____		_____	= 25
26)	_____		_____		_____	= 26
27)	_____		_____		_____	= 27
28)	_____		_____		_____	= 28
29)	_____		_____		_____	= 29
30)	_____		_____		_____	= 30
31)	15	x	2	+	1	= 31



Let's Try This Again

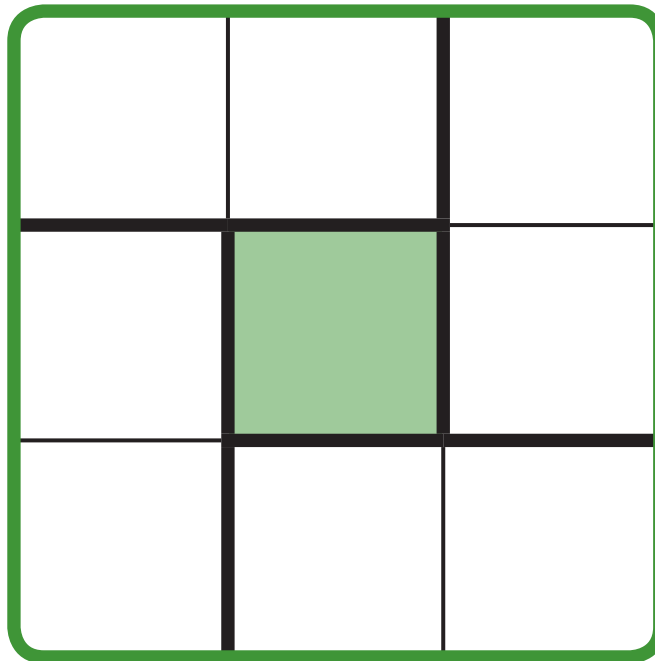


Progress To Analysis

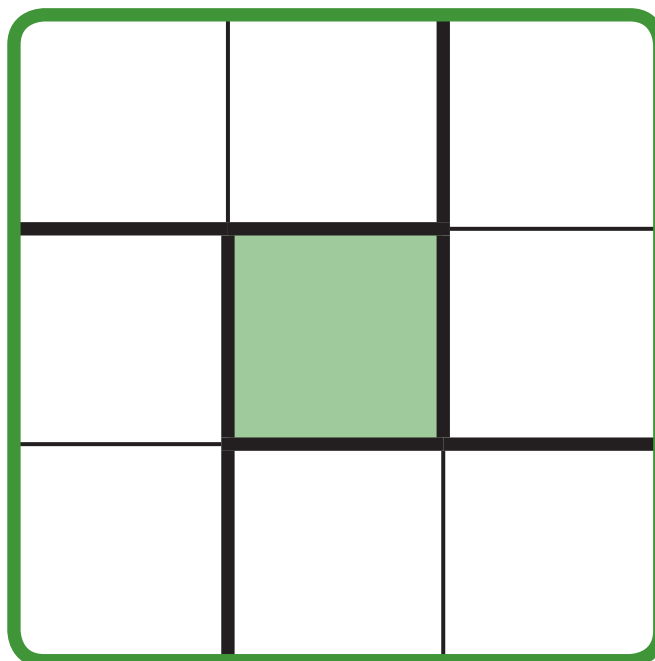
Name: \_\_\_\_\_

# Analysis

**A.** Use a set of dominoes and the grid below to make the 4 sides all total 13.



**B.** Use a set of dominoes and the grid below to make the 4 sides all total 12.



Knowledge  
Comprehension  
Application  
Analysis  
Synthesis  
Evaluation

Addition & Subtraction - Level 7 - Students will add and subtract numbers of any size.



Let's Try This Again



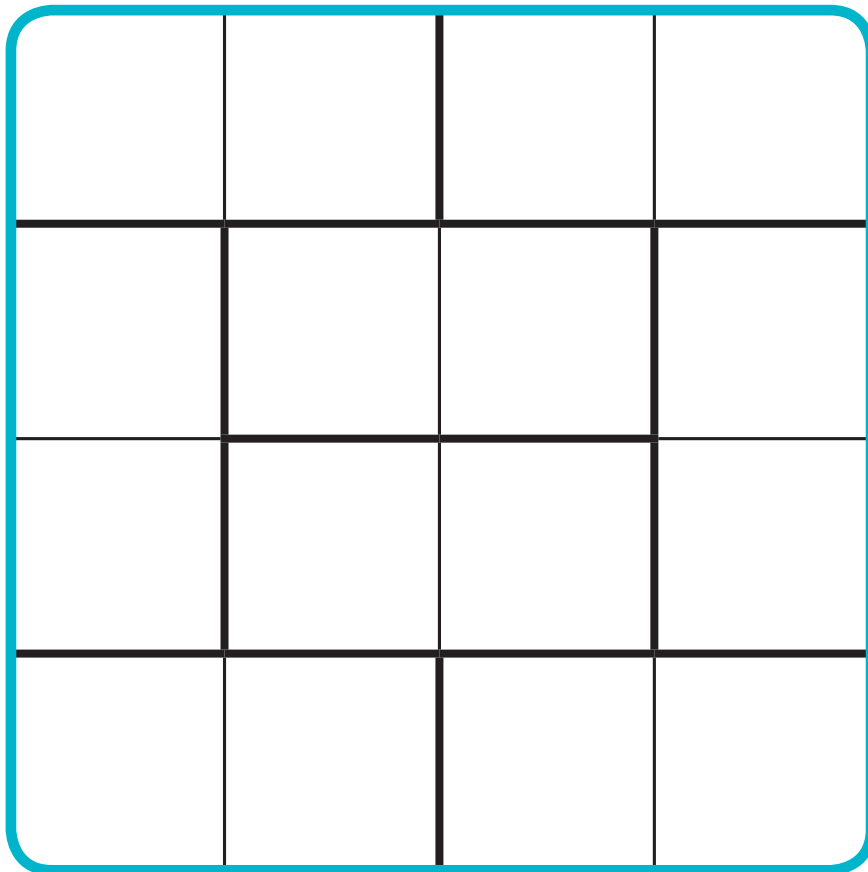
Progress To Synthesis

Name: \_\_\_\_\_

# Synthesis

## Dalmatians

Fit the eight dominoes below into the four by four grid so that each row, column, and diagonal is the same (some dominoes will need to be placed on their side).



Let's Try This Again



Progress To Evaluation

# Evaluation

The following questions and activities are provide as a starting point for fun discussions related to Addition and Subtraction. During these conversations students will have an opportunity to use appropriate mathematical language in its correct context, to engage in reflection on the Addition and Subtraction activities they have completed and to use logical reasoning to tie their in-class mathematics to its everyday context.



Students can play skittles multiple times swapping the skittles to determine which set of 6 skittles is the easiest to use and why this is ie. all end in 0 or 5; all are 2 digits rather than 3, pairs equal 10, 100 etc.



Students can create their own cross-number for other students to solve and see how difficult it is to create this.



Students can compare their answers for the Number Sentence Maker and see if there are multiple answers for some of the equations and why this may be.



Look at how using brackets would change the equations that could be created for the Number Sentence Maker.



What is the largest number students can make for the outside of a domino square?



What is the smallest number students can make for the outside of a domino square?

