

# Level 2 ADDITION

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

Level 2 is designed for students in their second year at school which is most often referred to as Year 1. The Addition strand allows students to use a range of strategies for addition involving 1 and 2 digit numbers.

Knowledge: Students will fill in the addition number bonds to 10 to demonstrate competence in this area before using this information to complete more complex 2 digit number bond 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 be give a set of items of varying prices in whole dollar denominations and must make combinations of items which are less than \$10 in total.



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 are given lists different combinations of items being purchased and must work out both the cost and the change from \$40 by counting on using the scale provided.



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 play Super Sum which uses two dice to create numbers and number combinations of bonds to 10 but with much more reasoning required on the part of students who wish to win.



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 play super sum again but this time 3 dice are used and numbers can go up to 18 and any combination of numbers which equate to 18 can be used.

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



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.

## Number Bonds To 10

Use the grids to help you complete these number bonds sums.

= 10

 $\star$ 

= 10

 $\star$ 

 $\star$ 

★

 $\star$ 

4 +

5+

★

★

1 + = 10			
*			

2 + = 10			)	
$\star$	$\star$			

3 +			= 10	)
$\star$	*	*		





7+

= 10

 $\star$ 

X

 $\star$ 

	9 +			)
$\star$	$\star$	$\star$	$\star$	$\star$
$\star$	$\star$	$\star$	$\star$	

Use the first two columns of easy number bonds to help with the harder questions.

1.	6 + = 10	11. 2 + = 10	21. 16 + = 20	31. 23 + = 30
2.	2 + = 10	12. 6 + = 10	22. 15 + = 20	32. 74 + = 80
3.	5 + = 10	13. 10 + = 10	23. 13 + = 20	33. 67 + = 70
4.	1 + = 10	14. 3 + = 10	24. 10 + = 20	34. 81 + = 90
5.	0 + = 10	15. 5 + = 10	25. 14 + = 20	35. 56 + = 60
6.	3 + = 10	16. 1 + = 10	26. 19 + = 20	36. 72 + = 80
7.	4 + = 10	17. 8 + = 10	27. 12 + = 20	37. 48 + = 50
8.	10 + = 10	18. 4 + = 10	28. 17 + = 20	38. 85 + = 90
9.	7 + = 10	19. 0 + = 10	29. 13 + = 20	39. 34 + = 40
10.	9 + = 10	20. 5 + = 10	30. 11 + = 20	40. 50 + = 60





Progress To Comprehension

Knowledge



AD 2 KN

# Let's Eat

Using the items shown below spend \$10 on each of the 3 lunch boxes. Make sure you make 1 that is full of always foods, 1 that is full of sometimes foods and 1 that is a mix of both types of food. Each box must cost \$10 or less.

	WATER			
Juice - \$2	Water - \$2	Hot Chips - \$3	Apple - \$2	Biscuit - \$1
Cupcake - \$2	Salad - \$4	Hamburger - \$4	Chocolate - \$2	Banana - \$2

(Draw a picture	of the lunchbox)	(Draw a picture	of the lunchbox)	(Draw a picture	of the lunchbox)
Always Food Lunchbox		Sometime Food Lunchbox		Combination Food Lunchbox	
Food Item	Cost	Food Item	Cost	Food Item	Cost
Total Cost:	1	Total Cost:	1	Total Cost:	<u> </u>





**Progress To Application** 



AD 2 CP

# Going Shopping

Add up the total of each set of items purchased below and the change needed from \$40. Use the numbers chart at the bottom to help you count on if required.



Item	Cost
Total:	
Change:	

Item	Cost
*	
Total:	
Change:	











AD 2 AP

Knowledge

Comprehension



### Super Sum

Students will need: One grid each. Two regular dice per group.

#### How to play:

1. Students take it in turns to roll the two dice. The two numbers rolled are added together and may be taken as a whole number or any combination of numbers which equal that total (ie. if a 4 and 6 are rolled a student may choose to cross off 4 and 6, 1 and 9, 2 and 8, 3 and 7, 5 and nothing or 10).

2. The chosen numbers are crossed off the score card. If no numbers can be crossed off then that student misses a turn.

3. The first student to cross off all their numbers wins.

1	2	3
4	5	6
7	8	9
10	11	12

1	2	3
4	5	6
7	8	9
10	11	12

1	2	3
4	5	6
7	8	9
10	11	12

1	2	3	
4	5	6	
7	8	9	
10	11	12	







AD 2 AN

Progress To Synthesis

- Students will use a range of strategies for addition involving 1 & 2 digit numbers

Addition - Level 2

Knowledge



# Advanced Super Sum

Students play Super Sum again but this time use 3 dice and an extended grid.

#### Students will need:

One grid each. Three regular dice per group.

#### How to play:

1. Students take it in turns to roll the three dice. The three numbers rolled are added together and may be taken as a whole number or any combination of numbers which equal that total (ie. if a 1, 7 and 10 are rolled a student may choose to cross off 1, 7 and 10, 8 and 10, 9 and nothing or 2, 6 and 10 etc).

2. The chosen numbers are crossed off the score card. If no numbers can be crossed off then that student misses a turn.

3. The first student to cross off all their numbers wins.

1	2	3	
4	5	6	
7	8	9	
10	11	12	
13	14	15	
16	17	18	

1	2	3	
4	5	6	
7	8	9	
10	11	12	
13	14	15	
16	17	18	

1	2	3
4	5	6
7	8	9
10	11	12
13	14	15
16	17	18

1	2	3
4	5	6
7	8	9
10	11	12
13	14	15
16	17	18





Progress To Evaluation

Addition - Level 2 Knowledge - Students will use a range of strategies for addition involving 1 & 2 digit numbers Comprehension Application Analysis Synthesis Evaluation



# Addition Discussion

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



As a fun activity why not split the class into 2 teams and have them race each other to find the number bond to 10. For more able students larger numbers can be used such as - how many more to get from 124 to 130.



Copy the items provided in the Comprehension section onto cardboard and students can make extra shopping items and then they can play shops.



Students could make shopping lists for their classmates to purchase for them like home shopping and their classmate must tell them how much their list will cost.



Using the 2 dice in Super Sum students can create a table of all the different ways they could record each combination rolled - it has been started for you below.

	1	2	3	4
1	1 & 2	1, 2 & 3	1,2,3 & 4	1,2,3,4 & 5
2	1, 2 & 3	1,2,3 & 4	1,2,3,4 & 5	1,2,3,4,5 & 6
3	1,2,3 & 4	1,2,3,4 & 5	1,2,3,4,5 & 6	1,2,3,4,5,6 & 7
4	1,2,3,4 & 5	1,2,3,4,5 & 6	1,2,3,4,5,6 & 7	1,2,3,4,5,6,7 & 8
5	1,2,3,4,5 & 6	1,2,3,4,5,6 & 7	1,2,3,4,5,6,7 & 8	1,2,3,4,5,6,7,8 & 9
6	1,2,3,4,5,6 & 7	1,2,3,4,5,6,7 & 8	1,2,3,4,5,6,7,8 & 9	1,2,3,4,5,6,7,8, 9 & 10



AD 2 FV

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- Students will use a range of strategies for addition involving 1 & 2 digit numbers

Addition - Level 2

Comprehension