BLOOMSM4TH

Makes Maths Fun

Level 3
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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BLOOMSM4TH Makes Maths Fun

Level 3

Addition

Level 3 is designed for students in their third year at school often called Year 2. The Addition strand allows students to use a range of mental strategies and informal recording methods for addition involving 1 and 2 digit numbers.

Knowledge: Students will use playing cards to play '2 on 2' to increase their fluency in modeling addition equations and mastering double digit addition without carrying.

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

STOP

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

Comprehension: Students will complete one and two step word problem addition algorithms where they draw equations to represent unknowns in all positions.

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

STOP

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

Application: Students will complete addition algorithms with answers of less than 100 using number reversals to create reciprocal numbers.

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

STOP

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

Analysis: Students will use and create varyingly spaced number lines to represent adding up to 120 to a given number.

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

STOP

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

Synthesis: Students will add up to four two-digit numbers demonstrating an understanding of the fact that in adding three-digit numbers, one adds hundreds, tens and ones separately.

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.

Name: _____

Two On Two

You will need:
A set of cards from 1 to 4 as shown below copied onto cardboard.

How to play:
1. Take it in turns to draw a card until 4 cards are drawn by each player.

2. As each card is drawn record it into the correct place on the chart below.

3. Add up the 2 two-digit numbers and the person closest to 50 without going over 50 wins.

Player 1				Player 2				
1st Card	2nd Card	Number 1		1st Card	2nd Card	Number 1		
____	____	____ ____	+	____	____	____ ____	+	Winner Player 1 or 2
3rd Card	4th Card	Number 2		3rd Card	4th Card	Number 2		
____	____	____ ____		____	____	____ ____		
	=	____ ____			=	____ ____		

Player 1				Player 2				
1st Card	2nd Card	Number 1		1st Card	2nd Card	Number 1		
____	____	____ ____	+	____	____	____ ____	+	Winner Player 1 or 2
3rd Card	4th Card	Number 2		3rd Card	4th Card	Number 2		
____	____	____ ____		____	____	____ ____		
	=	____ ____			=	____ ____		

1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4


Let's Try This Again


Progress To Comprehension

AD 3 KN

Addition - Level 3 - Students will use a range of strategies for addition involving 1 & 2 digit numbers.

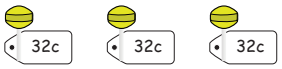
Knowledge
Comprehension
Application
Analysis
Synthesis
Evaluation

BLOOMSM4TH

Name: _____

Word Problems

Solve the word problems below using pictures and equations.

Word Problem	Pictures	Equation	Answer
If Jim bought 3 lollipops for 32c each how much did he spend?		32+32+32 = 96	96c
If Jim received 4c change how much money did he have?		? - 96 = 4 96 + 4 = ? ? = 100c	$1.00
If Sue bought 3 dresses for $12 how much did each cost?			
If Sue had $15 how many dresses could she have bought?			
If Peggy had 8 buttons and Betty had 6 button how many did they have altogether?			
If half the buttons were blue how many were not blue?			
If Ben has $80 and jackets cost $45 how many can he buy?			
If he bought 1 jacket how much change should he get?			
How many $15 ties could he buy with his change?			
How much will it cost if Ben buys 1 jacket, 1 tie and an $8 handkerchief?			

Let's Try This Again

Progress To Application

AD 3 CP

Addition - Level 3 - Students will use a range of strategies for addition involving 1 & 2 digit numbers.

Knowledge
Comprehension
Application
Analysis
Synthesis
Evaluation

BLOOMSMATH

Name: _____

Funny Numbers

You will need:

2 dice

The activity sheet below so you can complete this twice.

How to play:

1. Roll both dice.
2. Place the larger number in the tens column and the smaller number in the ones column.
3. Place the smaller number in the tens and the larger number in the ones.
4. Add the 2 numbers together.
5. What do you notice about your answer?

Activity Sheet

1. Roll 2 dice
2. Tens (Larger Number) Ones (Smaller Number) 2 Digit Number

☐	☐	☐

3. Tens (Smaller Number) Ones (Larger Number) +

☐	☐	☐

4. Add the numbers from 2. and 3. _____
5. What do you notice about your answer? _____

Try again and see if the same thing happens.

1. Roll 2 dice
2. Tens (Larger Number) Ones (Smaller Number) 2 Digit Number

☐	☐	☐

3. Tens (Smaller Number) Ones (Larger Number) +

☐	☐	☐

4. Add the numbers from 2. and 3. _____
5. What do you notice about your answer? _____

Let's Try This Again

Progress To Analysis

AD 3 AP

Addition - Level 3 - Students will use a range of strategies for addition involving 1 & 2 digit numbers.

Knowledge
Comprehension
Application
Analysis
Synthesis
Evaluation

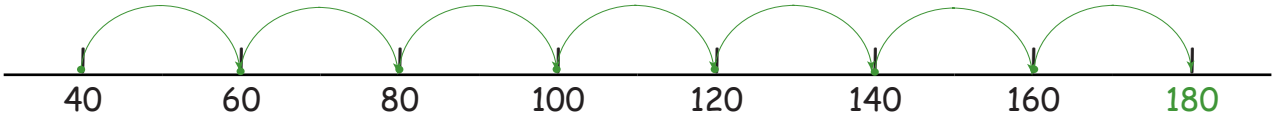
BLOOMSMATH

Name: _____

Jumping On A Number-Line

Use the varying number lines to add the given amount to each initial number.

Starting at 40 add 20 each time. What number did you finish at? 180



1. Starting at 20 add 10 each time. What number did you finish at? _____

20

2. Starting at 15 add 30 each time. What number did you finish at? _____

3. Starting at 40 add 120 each time. What number did you finish at? _____

4. Starting at 10 add 25 each time. What number did you finish at? _____

5. Starting at 50 add 15 each time. What number did you finish at? _____

6. Starting at 130 add 9 each time. What number did you finish at? _____

7. Starting at 70 add 30 each time. What number did you finish at? _____

Let's Try This Again

Progress To Synthesis

AD 3 AN

Addition - Level 3 - Students will use a range of strategies for addition involving 1 & 2 digit numbers.

Knowledge
Comprehension
Application
Analysis
Synthesis
Evaluation

BLOOMSMATH

Name: _____

700

You will need:

3 dice
At least 2 players

How to play:

1. Roll all 3 dice.
2. Each player must place the numbers one in each column.
3. Re-roll the 3 dice.
4. Each player must again place the numbers one in each column.
5. Each player adds the two 3 digit numbers they have created together.
6. The player who is closest to 700 without going over wins.

Player 1	100s	10s	1s	
	___	___	___	Number 1: ___ ___ ___
	100s	10s	1s	+
	___	___	___	Number 2: ___ ___ ___
				☐
Player 2	100s	10s	1s	
	___	___	___	Number 1: ___ ___ ___
	100s	10s	1s	+
	___	___	___	Number 2: ___ ___ ___
				☐

Player 1	100s	10s	1s	
	___	___	___	Number 1: ___ ___ ___
	100s	10s	1s	+
	___	___	___	Number 2: ___ ___ ___
				☐
Player 2	100s	10s	1s	
	___	___	___	Number 1: ___ ___ ___
	100s	10s	1s	+
	___	___	___	Number 2: ___ ___ ___
				☐

Let's Try This Again
Progress To Evaluation

Addition Discussion

The following questions and activities are provided 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.

Discuss the fact that '2 on 2' uses number cards from 1 to 4 instead of 2 dice. This ensures no answer can be more than 10 and therefore no carrying is required.

Present some more word problems or have students create some of their own provided they have the correct answer worked our before presenting their question to the class.

Look at the numbers created in Funny Numbers and whether this will work for 3 or 4 digit numbers in the same way that it works for 2 digit numbers.

Have students count on and off the decade by a given amount to practice less common counting patterns such as start at 14 and count by 10s or start at 30 and count by 7s. See what patterns are created.

Play 700 in groups in the classroom and discuss the importance of choosing the numbers you create mathematically as the largest or smallest number possible may not be the best number to choose. Make sure each group contains at least one strong mathematician or provide calculators.