



Makes Maths Fun

Level 6

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 6 is designed for students in their sixth year at school often called Year 5. Students will select and apply appropriate strategies for addition and subtraction with counting numbers of any size.

Knowledge: Students will play a game of darts to select and apply appropriate strategies for addition and subtraction with counting numbers of any size.



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 choose classmates and convert their names to numbers. These are then added together.



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 suggest the child in the school whom they believe will have the highest scoring name and test competing names.



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 identify the rule they used to discover high scoring names and compare with others to find the most accurate.



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 a baby names book and a phone book to create the highest and lowest scoring names possible.

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

Students will play a game of darts to select and apply appropriate strategies for addition or subtraction with counting numbers of any size.

You Will Need:

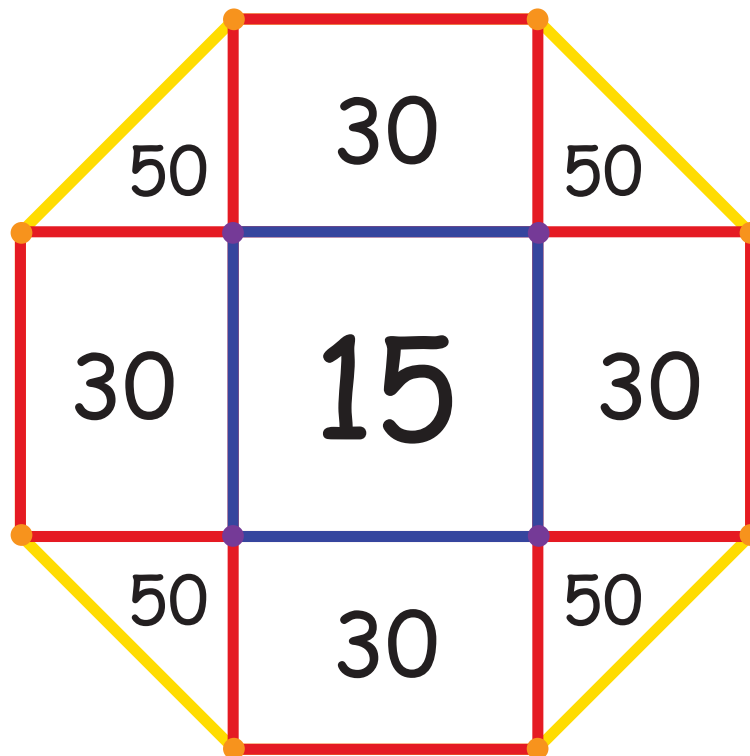
- ◇ 5 safety darts per team such as BoomCo darts
- ◇ A Recording Sheet and pencil per team.
- ◇ A dart board printed onto photographic paper (which BoomCo darts stick to) per team.
- ◇ Adhesive tape to allow the dart board to be stuck to the wall

**Alternatively counters could be tossed onto a board printed on regular paper placed on the ground.*

How To Play:

- ◇ In teams of 4, students stand with their Recording Sheet and 5 safety darts at least 1 metre from their team's dart board.
- ◇ The first student in each team throws their darts at the dart board attempting to score as many 50s as possible so that they will have the highest score.
- ◇ The first student records the numbers they hit and adds up their total score while the second student throws their dart.
- ◇ This total is then deducted from 1000 and a running score kept.
- ◇ The second student calculates their score while the remaining students take it in turns to throw darts.
- ◇ The first student to reach a score of zero by adding their darts and deducting this from their previous score wins.

Sample Dart Board - Any numbers can be used for the dart board.



Let's Try This Again



Progress To Comprehension

Name: _____

Knowledge

Score Sheet.

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"/>
Winning Student:					

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"/>
Winning Student:					

Addition & Subtraction - Level 6 - Students will add and subtract counting numbers of any size.

Knowledge
Comprehension
Application
Analysis
Synthesis
Evaluation



Let's Try This Again



Progress To Comprehension

Name: _____

Comprehension

Select 5 classmates and convert their names to numbers. These are then added together.

A 1	B 2	C 3	D 4	E 5	F 6	G 7	H 8	I 9	J 10	K 11
L 12	M 13	N 14	O 15	P 16	Q 17	R 18	S 19	T 20	U 21	V 22
			W 23	X 24	Y 25	Z 26				

P A T R I C K **M O R R I S**
16 1 20 18 9 3 11 13 15 18 18 9 19

Addition:

PATRICK
+ MORRIS

16120189311
+ 13151818919

29272008230

Multiplication: (using a calculator if needed)

$$P \times A \times T \times R \times I \times C \times K$$
$$16 \times 1 \times 20 \times 18 \times 9 \times 3 \times 11 = 1710720$$

$$M \times O \times R \times R \times I \times S$$
$$13 \times 15 \times 18 \times 18 \times 9 \times 19 = 10803780$$



Let's Try This Again



Progress To Application

Name: _____

Application

Suggest the student in the school whom you believe will have the highest scoring name and test competing names.

Propose 5 possible names below:

Name: _____ Calculation: _____

Name: _____ Calculation: _____

Name: _____ Calculation: _____

Name: _____ Calculation: _____

Name: _____ Calculation: _____

Find 5 alternate names other classmates have chosen:

Name: _____ Calculation: _____

Name: _____ Calculation: _____

Name: _____ Calculation: _____

Name: _____ Calculation: _____

Name: _____ Calculation: _____

How do these compare to your names?

Where any scores the same or very similar? Why was this the case?



Let's Try This Again



Progress To Analysis



Addition & Subtraction - Level 6 - Students will add and subtract counting numbers of any size.



Name: _____

Analysis

Identify the rule you used to discover high scoring names and compare with others to find the most accurate.

What rule did you use to try to find the longest name in the school?

Ask a classmate what their rule was?

Use the roles for other classes and choose the 5 names likely to have the highest score in the school. Test the 2 techniques for calculating name scores and see which works most easily.

Addition & Subtraction - Level 6 - Students will add and subtract counting numbers of any size.

Knowledge
Comprehension
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Let's Try This Again

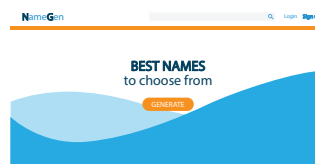


Progress To Synthesis

Name: _____

Synthesis

Use a baby names book and a phone book or a website to create the 10 highest and 10 lowest scoring names you can make



Highest:

Lowest:

What did you use to help you find these names?



Let's Try This Again



Progress To Evaluation



Evaluation

The following questions and activities are provided 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.



What was the lowest number of rounds you would need to play darts to reach zero?



Whose name in the class had the highest and lowest scores?



Why was this the case? What makes names have higher or lower scores?



Compare names students have created and ways in which they are the same and different from each other.



What if the names needed to be the smallest scoring names how would this change the names?



What if the surname was subtracted from the first name - How would this affect the names created?

