BLOOMSM4TH

Makes Maths Fun

Level 3

MULTIPLICATION & DIVISION

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

Multiplication & Division

Level 3 is designed for students in their third year at school often called Year 2. The Multiplication and Division strand allows students to use a range of mental strategies and concrete materials to complete multiplication and division algorithms.

Knowledge: Students will complete simple multiplication and division algorithms using 1, 2, 3, 5, 9 and 10 times tables. The answers will create a pattern on their answer grid.

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 play 'Drop The Donkey' to model and use strategies for multiplication including arrays, equal groups and repeated addition.

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 model and use strategies for division including sharing, arrays and repeated subtraction.

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 complete word problems to record using drawings, numerals, symbols and words multiplication and division strategies.

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 complete a cross-number using addition, subtraction, multiplication and division operations.

Evaluation: Suggested questions provide a starting point for discussions related to Multiplication and Division.

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: _____

Colour By Number

Complete the multiplication table below.

X	1	2	3	5	9	10
1						
2						
3						
5						
9						
10						

Complete each sum and then colour the answers on the grid above.

1. 3 ÷ 1 = ____
2. 10 x 2 = ____
3. 3 x 3 = ____
4. 9 ÷ 9 = ____
5. 10 x 10 = ____
6. 50 ÷ 5 = ____
7. 2 x 10 = ____
8. 10 ÷ 2 = ____
9. 3 x 5 = ____
10. 3 x 10 = ____
11. 10 ÷ 5 = ____
12. 5 x 5 = ____
13. 45 ÷ 5 = ____
14. 10 x 3 = ____
15. 15 ÷ 3 = ____
16. 9 x 10 = ____
17. 20 ÷ 2 = ____
18. 5 x 10 = ____
19. 10 x 5 = ____
20. 4 ÷ 2 = ____
21. 5 x 3 = ____
22. 6 ÷ 2 = ____
23. 10 x 9 = ____
24. 18 ÷ 2 = ____

Let's Try This Again

Progress To Comprehension

Name: _______________

Drop The Donkey (1)

You will need:

A blank die with 1, 2 and 3 repeated twice each.
The donkey game card on page 2.
The recording sheet below.
2 Players.

How to play:

1. Each player has a turn rolling the die onto the donkey.
2. Each player then multiplies the number on the die by the number in the playing area in which the die finishes. If the die is touching two areas the player may choose the higher of the two.
3. Players add their scores from each round.
4. The winner is the first player to reach 80.

Player 1	Total	Player 2	Total
die x area = score ___ x ___ = _____		die x area = score ___ x ___ = _____	
die x area = score ___ x ___ = _____		die x area = score ___ x ___ = _____	
die x area = score ___ x ___ = _____		die x area = score ___ x ___ = _____	
die x area = score ___ x ___ = _____		die x area = score ___ x ___ = _____	
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die x area = score ___ x ___ = _____		die x area = score ___ x ___ = _____	
die x area = score ___ x ___ = _____		die x area = score ___ x ___ = _____	

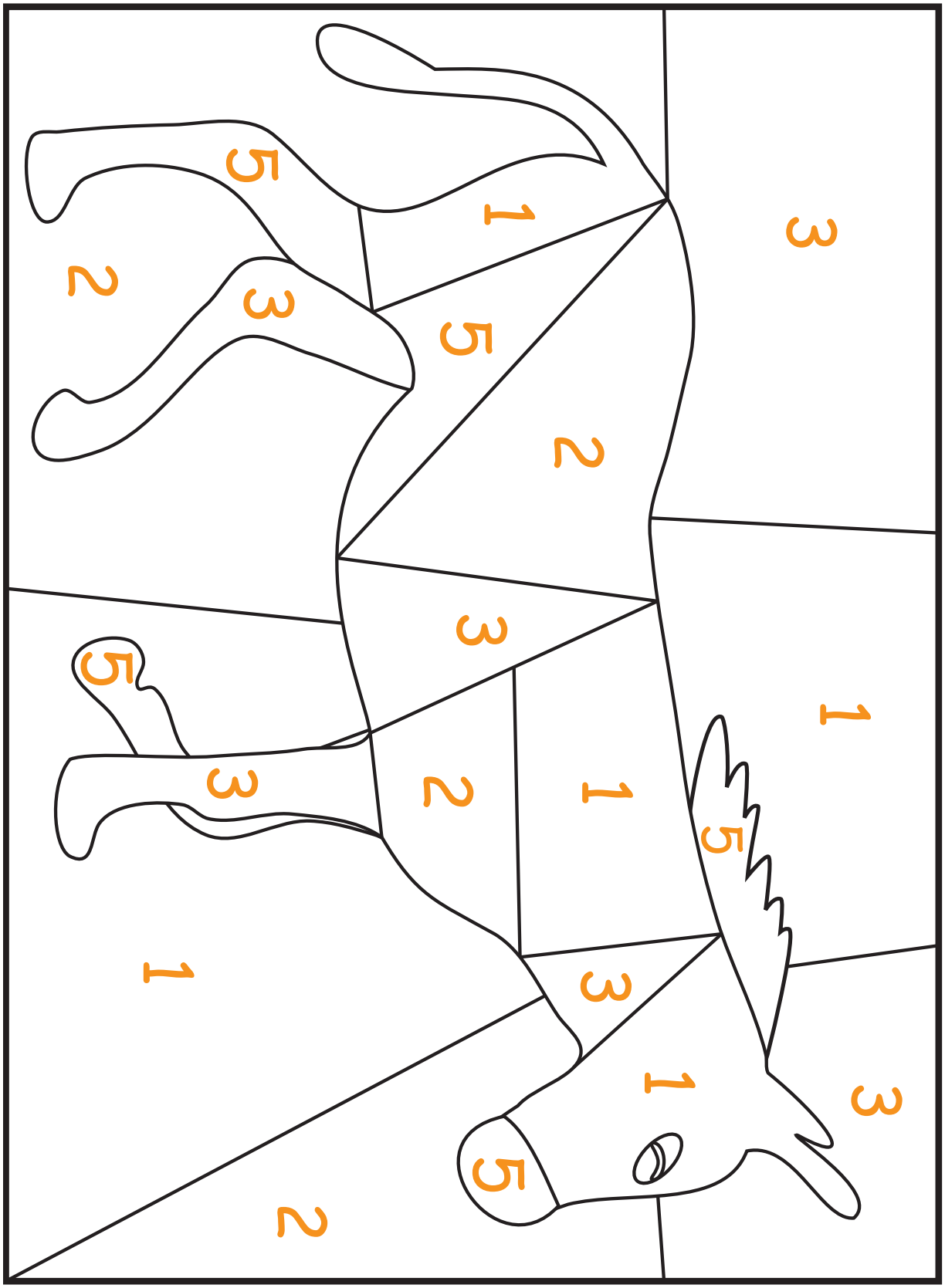
Let's Try This Again   Progress To Application

Multiplication & Division - Level 3 - Students will use a range of strategies for solving algorithms.

Knowledge | Comprehension | Application | Analysis | Synthesis | Evaluation

Name: _____

Drop The Donkey (2)



Let's Try This Again

Progress To Application

MD 3 CP2

Knowledge
Comprehension
Application
Analysis
Synthesis
Evaluation

Multiplication & Division - Level 3 - Students will use a range of strategies for solving algorithms.

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Name: _____

Table Of Tables

You will need:

36 Counters
A regular die

How to play:

1. Roll the die once to find out the number of rows and a second time for the columns.
2. Arrange the counters into the rows and columns and count how many counters there are in total.
3. Use the table below for your answers then complete the grid at the bottom of the page using repeated addition or direct counting or rows and columns.

Rows	Tables	Total Counters	Multiplication
			Rows x Tables = Total _____ x _____ = _____

X	1	2	3	4	5	6
1						
2						
3						
4						
5						
6						36

Let's Try This Again

Progress To Analysis

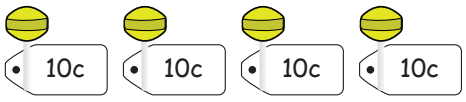
Name: _____

Problems With Words

Complete the following multiplication and division word problems.

Word Problem	Picture Solution	Mathematical Solution	Answer
If Mary bought 3 apples for 30c each how much did she spend?		30c x 3 = ?	
If Liam bought 4 cakes for $2.00 how much did each cake cost?			
If Bob drank 100mls of water for breakfast, recess and lunch how much did he drink altogether?			
If Joe has 3 pencils 20cm long and 2 pencils 10cm long how long are all his pencils end to end?			
If Ben does 20mins of exercise 5 times a week how many minutes of exercise does Ben do each week?			
If Jenny bought 12m of fabric to make 4 scarves how long will each scarf be?			

Now make up some word problems of your own for each set of pictures. Remember to solve each word problem you write.

Pictures	Word Problem	Solution
		
 ÷ 2		
 x 6 hours each		
 x 3 trips of 15mins		
 18 runs ÷ 3 over		

 Let's Try This Again

 Progress To Synthesis

Multiplication & Division - Level 3 - Students will use a range of strategies for solving algorithms.

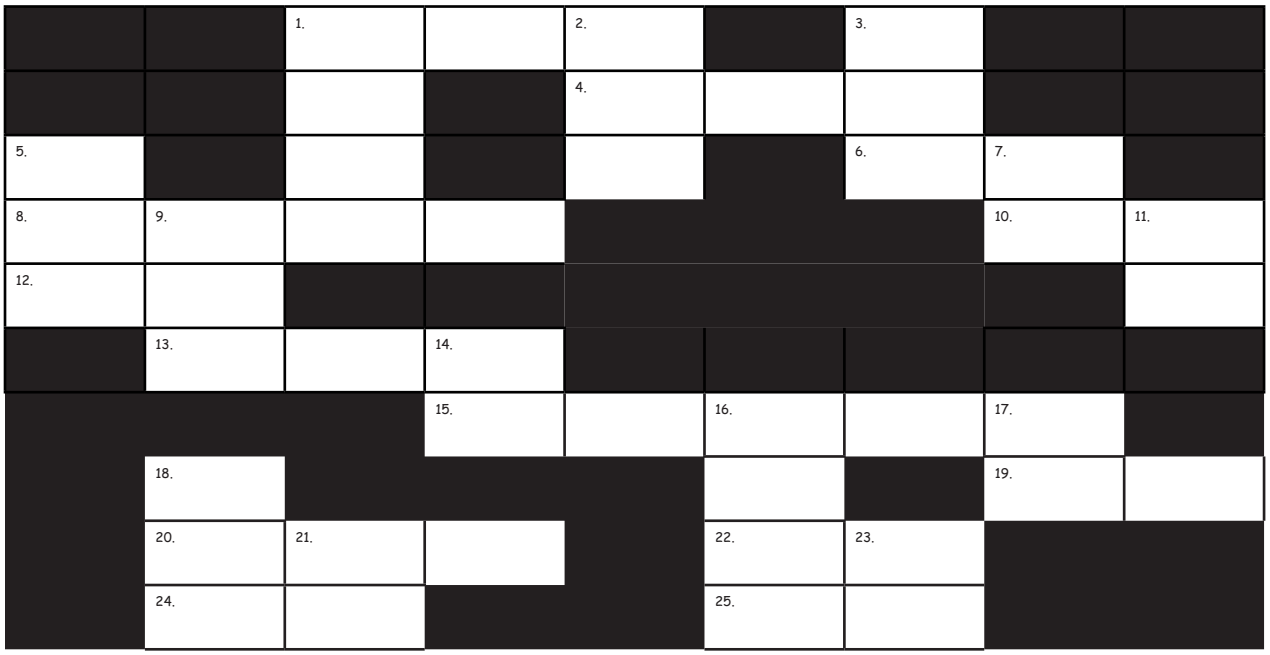
Knowledge
Comprehension
Application
Analysis
Synthesis
Evaluation

BLOOMSMATH

Name: _____

Cross-Number

Similar to a cross-word complete the cross-number below using addition, subtraction, multiplication and division operations.



Across

1. 111 + 111

4. 10 x 10

6. (10 x 6) + (2 x 2)

8. 1000 + 400 + 50 + 7

10. 11 x 8

12. 60 – 3

13. 300 + 90 + 1

15. 85000 + 730 + 4

19. 32 – 12

20. 620 ÷ 2

22. 70 - 1

Down

1. 2000 + 400 + 5

2. 215 – 5

3. 300 + 6

5. 200 + 200 + 10 + 5

7. (4 x 10) + (2 x 4)

9. 490 - 17

11. 90 – 3

14. 3 x 6

16. 7000 + 66

17. 84 ÷ 2

18. 240 – 5

Let's Try This Again

Progress To Evaluation

MD 3 SS

Knowledge
Comprehension
Application
Analysis
Synthesis
Evaluation

Multiplication & Division - Level 3 - Students will use a range of strategies for solving algorithms.

BLOOMSMATH

Multiplication and Division Discussion

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

Look at the pattern on the Colour-By-Number grid and then find patterns in a full 100s chart for tables ie. 5's appear vertically and horizontally.

Record the possible results for the Drop The Donkey game and what the results would have been if a regular 1-6 die was used. How does changing the numbers on the die affect how long the game takes? Why were the numbers changed?

Explore repeated addition as an alternative for multiplication and discuss why it is quicker and easier to know the multiplication fact than perform repeated addition.

Have students share their word problems with the class and create some of their own for classmates to solve. The student must know the answer before posing the problem.

Play the game "Buzz" where students sit in a circle and must count sequentially around the circle but each time a number in a given multiplication set is to be said it is replaced with "Buzz" ie. For 3 x tables 1, 2, Buzz, 4, 5, Buzz, 7, 8 Buzz etc. Time limits can be imposed and students who make a mistake can be eliminated until the next round.