BLOOMSM4TH
Makes Maths Fun

Level 5
WHOLE NUMBER

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

By Rachel McCann (B.Teach; B.Ed Hons; M.ED (Special Ed.)

BLOOMSM4TH
Makes Maths Fun
Level 5

Whole Number

Level 5 is designed for students in their fifth year at school often called Year 4. Students will count, order, read and record numbers up to four digits.

Knowledge: Students will complete a cross-number using numbers up to 4 digits long.

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 "4 Card Stud" looking at highest and lowest number combinations.

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 identify which cards will yield the best results and improve their chance of winning "4 Card Stud".

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 play the game "Number Reverses".

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 use a round of reverses to see if they could have won any quicker.

Evaluation: Suggested questions provide a starting point for discussions related to Whole Number.

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

See if you can complete the cross-word below where each answer is written in words on the grid.

Knowledge

Comprehension

Application

Analysis

Synthesis

Evaluation

BLOOMSMATH
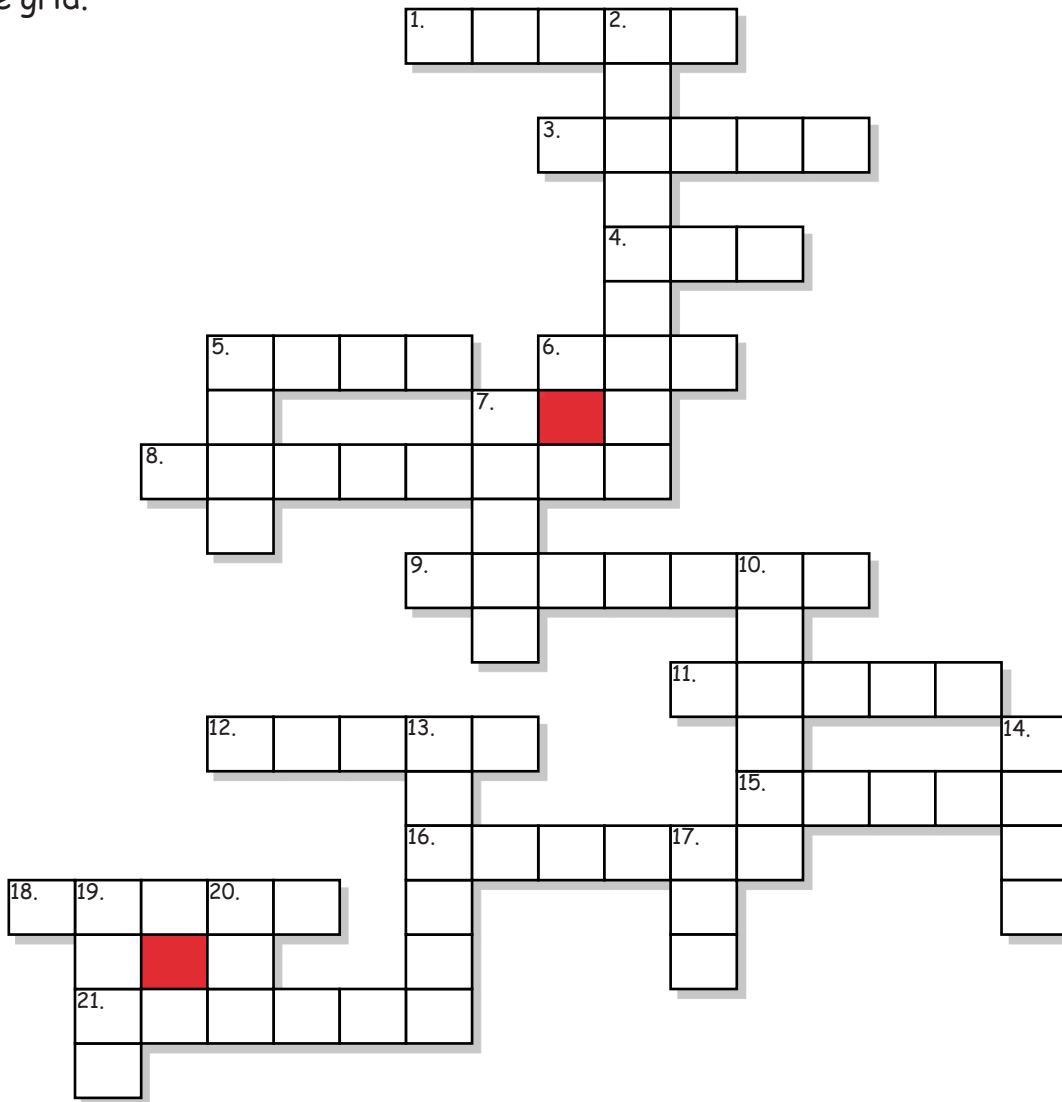
Across:
1. Number of 10s in 500?
3. Number of 100s in 4000?
4. In 5906 the number in the units column is?
5. Number of 1000s in 5026?
6. Numerals in 5?
8. 9 is in the ? column in 2938?
9. Number of 1s in 70?
11. Number in the 1000s column in 8315?
12. Number of 10s in 600?
15. Number in the 1s column in 5103?
16. Number of 1s in 80?
18. 4 is in the ? column in 8064?
21. Number of 10s in 900?

Down:
2. In 3629 the 3 is in the ? column?
5. Number of 1000s in 4000?
7. In 1749 a ? is in the hundreds column?
10. Number of 100s in 3000?
13. Number of 100s in 2000?
14. 7 is in the ? column in 2179?
17. Numerals in 58?
19. Number in the 10s column in 4792?
20. Number of 10s in 100?

Let's Try This Again

Progress To Comprehension

WN 5 KN

Name: _____

Comprehension

Play the game "4 Card Stud".

In groups of 4 you will need:

- A pack of cards per group with picture cards (J, Q, K) removed
- 10 tokens, counters or coins

Each player chooses four cards.
They then make:

◊ The highest number they can using all four cards. 1 token is awarded to the student with the highest number.

◊ The lowest number they can using all four cards 1 token is awarded to the student with the lowest number.

◊ All the different number combinations they can make using the four cards. They must then choose just 4 of these number combinations to play for each of the 4 rounds. This cannot include the highest and lowest numbers already used.

◊ Students present 1 of their 4 numbers to play against other students. The students with the highest and lowest numbers each gain 1 token. If students present the same number no student wins that round.

◊ Students keep presenting their card combinations for 4 rounds until all tokens are awarded for the highest and lowest combination per round. Students can only play a number they have chose once.

The student with the most tokens wins.

Card can be shuffled and redrawn to play numerous rounds of this game so all students have a chance of winning.

	Overall	Round 1	Round 2	Round 3	Round 4
Highest Number					
Lowest Number					

Let's Try This Again   Progress To Application

Whole Number – Level 5 – Students will count, order, read and record numbers up to 4 digits.

Knowledge
Comprehension
Application
Analysis
Synthesis
Evaluation

BLOOMSM4TH

Name: _____

Application

Replay the game "4 Card Stud".

This time you can choose which cards you want to use. List all the possible numbers below and highlight the 4 you are going to use. Be careful though because if you choose the same numbers as someone else neither of you will win.

Cards Chosen:

Possible Combinations:

Play with 4 classmates and see how well your strategy worked. You may want to play a few rounds to test and improve your strategy.

Let's Try This Again   Progress To Analysis

Whole Number - Level 5 - Students will count, order, read and record numbers up to 4 digits.

Knowledge
Comprehension
Application
Analysis
Synthesis
Evaluation

BLOOMSM4TH

Name: _____

Analysis

Play the game "Number Reverses" and see if you can devise a winning strategy.

In the boxes below randomly write the numbers from 1 to 9 in a jumbled order *ie. 152739468.*

◊ Player 1 selects which section of the sequence they will reverse and writes the new number sequence.

◊ Player 2 repeats this but must choose their own numbers to reverse.

◊ The winner is the first player to have all the numbers in their correct order.

2 Example for Sequence: 152739468

Example 1
Player 1: 152739468
Player 2: 125739468
Player 1: 123759468
Player 2: 123495768
Player 1: 123459768
Player 2: 123459786
Player 1: 123456879
Player 2: 123456789

Example 1
Player 1: 152739468
Player 2: 152493768
Player 1: 152394768
Player 2: 125394768
Player 1: 123594768
Player 2: 123495768
Player 1:123459768
Player 2: 123456798
Player 1:123456789

In the first example Player 2 won while in the second example Player 1 won.
See if you can win against another player:

Starting Number:

Player	Numbers Turned	New Number
1		
2		
1		
2		
1		
2		

Let's Try This Again   Progress To Synthesis

Whole Number - Level 5 - Students will count, order, read and record numbers up to 4 digits.

Knowledge
Comprehension
Application
Analysis
Synthesis
Evaluation

BLOOMSMATH

Name: _____

Synthesis

Use your results from "Number Reverses" in Analysis to see if they could have won any quicker. Try 3 different ways of reversing the numbers.

Initial Number Combination:

Numbers Turned	New Number

Numbers Turned	New Number

Numbers Turned	New Number

What was the fewest moves you needed to arrange the numbers in numerical order from 1 to 9?

Let's Try This Again   Progress To Evaluation

WN 5 SS

Whole Number - Level 5 - Students will count, order, read and record numbers up to 4 digits.

Knowledge
Comprehension
Application
Analysis
Synthesis
Evaluation

BLOOMSMATH

Evaluation

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

Does turning more numbers increase or decrease the number of turns needed to win in Number Reverses?

How many numbers could you make from 4 given numbers.

Which 4 numbers were the best to choose in 4 card stud – why?

What "tricks" are there for winning in number reverses?

Can the class solve the example numbers in less than 8 turns?

Have students race to see who can make the biggest/smallest number from 4 given numbers.

Play a game where, in teams of 4, each player rolls a number from a 9 sided die and they must place it in 1 of 4 spaces but once placed it can not be moved. Teams must try to make the largest or smallest number as chosen by you. Example:

Round 1 – The team rolls a 4. _____, 4 _____, _____
Round 2 - The team rolls a 5 _____, 4 _____, 5
Round 3 - The team rolls a 7 _____, 4,7, 5
Round 4 - The team rolls a 9 9, 4,7, 5

(They would have been better making 9754 as the largest number but they did not know what they would get and could equally have ended up with 1475).

Whole Number - Level 5 - Students will count, order, read and record numbers up to 4 digits.

Knowledge

Comprehension

Application

Analysis

Synthesis

Evaluation

BLOOMSM4TH