# Thursday $18^{\text {th }}$ June Year 5/6: Prime Numbers 

What are prime numbers? What are composite numbers? Sort the numbers under the correct headings.


What are prime numbers? What are composite numbers? Sort the numbers under the correct headings.


Prime numbers have only two factors.
Composite numbers have more than two factors.

## Varied Fluency 1

Circle the prime numbers.
$\begin{array}{llllll}3 & 6 & 11 & 19 & 21 & 41\end{array}$

## Varied Fluency 1

Circle the prime numbers.


21

## Varied Fluency 2

## Which of the following numbers are composite numbers?



23

## 5

## Varied Fluency 2

Which of the following numbers are composite numbers?

## 67



23

## 5

## Varied Fluency 3

Which numbers are in the wrong place?

| Prime <br> Numbers |  | Composite <br> Numbers |  |
| :---: | :---: | :---: | :---: |
| 83 | 33 | 35 | 84 |
| 12 | 13 | 56 | 97 |

## Varied Fluency 3

Which numbers are in the wrong place?

| Prime <br> Numbers |  | Composite <br> Numbers |  |
| :---: | :---: | :---: | :---: |
| 83 | 33 | 35 | 84 |
| 12 | 13 | 56 | 97 |

## Varied Fluency 4

## True or false?



## Varied Fluency 4

## True or false?



True, its only factors are 1 and 29.

## Problem Solving 1

Use the digit cards to make prime numbers which are less than 100.


Find all the possibilities.

## Problem Solving 1

Use the digit cards to make prime numbers which are less than 100.


Find all the possibilities.
$2,3,7,23,29,37,73,79$ and 97

## Problem Solving 2

Choose the numbers from the selection below and add them to the table.


| 15 | 27 | 11 | 31 | 18 | 2 | 23 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

What do you notice?

## Problem Solving 2

Choose the numbers from the selection below and add them to the table.

| Prime Numbers | Composite <br> Numbers |  |  |
| :---: | ---: | ---: | ---: |
| 11 | 23 | 15 | 27 |
| 2 | 31 | 18 |  |


| 15 | 27 | 11 | 31 | 18 | 2 | 23 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

What do you notice?
2 is the only prime number which is not an odd number.

## Reasoning 1

## Are the following statements true or false?



Eliza

## Reasoning 1

## Are the following statements true or false?



1. False, 1 is not a prime number.
2. True, the only factors of 43 are 1 and 43.
3. True, any number ending in 5 , other than 5 , can be divided by 5 as well as itself.

## Year 5 Developing

1a. Circle the prime numbers.
1, 2,
5, 9, 12,
17

1b. Circle the prime numbers.

3, 6, 7, 11, 13, 15
號
2b. Which of the following numbers are composite numbers?


3a. Which numbers are in the wrong place?

| Prime <br> Numbers |  | Composite <br> Numbers |  |
| :---: | :---: | :---: | :---: |
| 15 | 17 | 18 | 14 |
| 7 | 4 | 3 | 6 |

3b. Which numbers are in the wrong place?

| Prime <br> Numbers |  | Composite <br> Numbers |  |
| :---: | :---: | :---: | :---: |
| 19 | 5 | 2 | 17 |
| 11 | 16 | 9 | 14 |

2a. Choose the prime numbers from the selection below and add them to the table.


| 3 | 25 | 11 | 2 | 17 | 5 | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

What do you notice?


3a. Are the following statements true or false?


Jacob
Explain why.

2b. Choose the prime numbers from the selection below and add them to the table.


| 14 | 23 | 19 | 2 | 13 | 29 | 26 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

What do you notice?
아
3b. Are the following statements true or false?
Erin


Maya


Ezra
Explain why.

## Year 5 Expected

5a. Circle the prime numbers.
4, 5, 9, 17, 29, 35

7a. Which numbers are in the wrong place?

| Prime <br> Numbers |  | Composite <br> Numbers |  |
| :---: | :---: | :---: | :---: |
| 71 | 21 | 47 | 32 |
| 97 | 17 | 84 | 61 |

5b. Circle the prime numbers.

$$
2,13,16,23,30,43
$$

6b. Which of the following numbers are composite numbers?


7b. Which numbers are in the wrong place?

| Prime <br> Numbers |  | Composite <br> Numbers |  |
| :---: | :---: | :---: | :---: |
| 72 | 11 | 29 | 2 |
| 83 | 23 | 64 | 37 |

5a. Choose the prime numbers from the selection below and add them to the table.


| 37 | 42 | 18 | 51 | 85 | 53 | 29 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |



Explain why.

5b. Choose the prime numbers from the selection below and add them to the table.


| 5 | 22 | 8 | 59 | 7 | 2 | 73 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

What do you notice?

6b. Are the following statements true or false?


Explain why.

## Year 6 and Year 5 Greater Depth

9a. Circle the prime numbers.

53, 55, 67, 75, 97, 107

10a. Which of the following numbers are composite numbers?

9b. Circle the prime numbers.

43, 57, 71, 87, 89, 109

10b. Which of the following numbers are composite numbers?


11a. Which numbers are in the wrong place?

| Prime <br> Numbers |  | Composite <br> Numbers |  |
| :---: | :---: | :---: | :---: |
| 43 | 102 | 127 | 27 |
| 29 | 73 | 56 | 83 |

11b. Which numbers are in the wrong place?

| Prime <br> Numbers |  | Composite <br> Numbers |  |
| :---: | :---: | :---: | :---: |
| 89 | 21 | 36 | 85 |
| 57 | 103 | 113 | 80 |

8 a . Choose the prime numbers from the selection below and add them to the table.


| 101 | 109 | 2 | 104 | 131 | 56 | 47 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

What do you notice?

9a. Are the following statements true or false?


8 b . Choose the prime numbers from the selection below and add them to the table.

| Odd Tens Value | Even Tens Value |  |
| :--- | :--- | :--- |
|  |  |  | | 53 | 113 | 89 | 37 | 103 | 151 | 41 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

What do you notice?

9b. Are the following statements true or false?


