

Name \_\_\_\_\_ Date \_\_\_\_\_ Bell \_\_\_\_\_ Pg \_\_\_\_\_

# Prime Time Do now as warm up

Use a pencil, highlighter, and the hundreds board below. Follow each step to find the prime numbers between 1 and 100. Remember, a prime number can only be divided evenly by 1 and the number itself.

1. Cross out # 1 on the board.
2. Leave # 2 on the board, but count on by twos and cross off all the multiples of 2.  
About how many numbers did you cross off? \_\_\_\_\_
3. Leave # 3 on the board, but count on by threes and cross off all the multiples of 3 that are left on the board.
4. # 4 will be crossed off the board already, but count on by fours and cross off all the multiples of 4 that are left on the board. What did you notice?
5. Leave # 5 on the board, but use the divisibility rule for fives and cross off all the multiples of 5 that are left on the board.
6. # 6 will be crossed off the board already, but count on by sixes and cross off all the multiples of 6 that are left on the board. What did you notice? Why?

7. Leave # 7 on the board, but count on by sevens. Cross off all the multiples of 7 that are left on the board. How many did you cross off? \_\_\_\_\_

8. Now, highlight the numbers that have **not** been crossed off. These are the prime numbers between 1 - 100.

9. There are 25 prime numbers on the board.

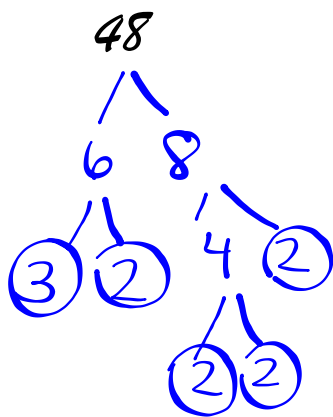
10. Which number is not prime or composite? 1

11. There are 74 composite numbers crossed out on the board.

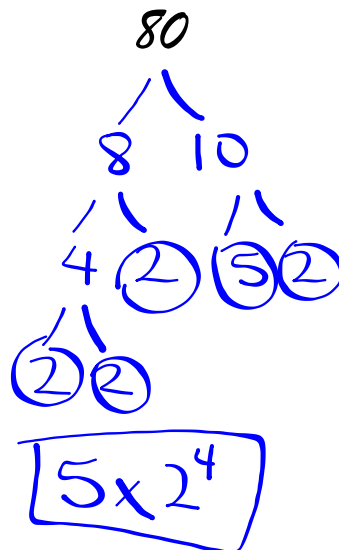
<del>1</del>	2	3	<del>4</del>	5	<del>6</del>	7	<del>8</del>	<del>9</del>	<del>10</del>
11	12	13	14	<del>15</del>	16	17	18	19	20
<del>21</del>	22	23	24	<del>25</del>	26	<del>27</del>	28	29	30
31	32	<del>33</del>	34	<del>35</del>	36	37	38	<del>39</del>	40
41	42	43	44	<del>45</del>	46	47	48	<del>49</del>	50
<del>51</del>	52	53	54	<del>55</del>	56	<del>57</del>	58	59	60
61	62	<del>63</del>	64	<del>65</del>	66	67	68	<del>69</del>	70
71	72	73	74	<del>75</del>	76	<del>77</del>	78	79	<del>80</del>
<del>81</del>	82	83	84	<del>85</del>	86	<del>87</del>	88	89	90
<del>91</del>	92	<del>93</del>	94	<del>95</del>	96	97	98	<del>99</del>	100

P.34

Prime factorization: a number expressed as a product of factors that are all prime using factor trees. Then express the results in exponential form.



$$3 \times 2 \times 2 \times 2 \times 2$$
$$\boxed{3 \times 2^4}$$



$$\boxed{5 \times 2^4}$$

## Greatest Common Factors:

$$\begin{array}{r} 2 \overline{) 18, 16} \\ 2 \overline{) 4, 8} \\ 2 \overline{) 2, 4} \\ 1, 2 \end{array}$$

$$\text{GCF} = 2 \times 2 \times 2$$

(8)

$$\begin{array}{r} 2 \overline{) 18, 20} \\ 9, 10 \end{array}$$

GCF = 2

$$\begin{array}{r} 11 \overline{) 22, 66} \\ 2 \overline{) 2, 6} \\ 1, 3 \end{array}$$

GCF = 11 × 2

(22)

## Lowest Common Multiples:

$$\begin{array}{r}
 2 \overline{) 8, 16} \\
 2 \overline{) 4, 8} \\
 2 \overline{) 2, 4} \\
 1, 2
 \end{array}$$

$$\text{LCM} = 2 \times 2 \times 2 \times 1 \times 2 \\
 \textcircled{16}$$

$$\begin{array}{r}
 2 \overline{) 18, 20} \\
 9, 10
 \end{array}$$

$$\text{LCM} = 2 \times 9 \times 10 \\
 \textcircled{180}$$

$$\begin{array}{r}
 11 \overline{) 22, 66} \\
 2 \overline{) 2, 6} \\
 2, 3
 \end{array}$$

$$\text{LCM} = 11 \times 2 \times 2 \times 3 \\
 11 \times 12 \\
 \textcircled{132}$$

Prime, Composite, GCF, LCM, and Prime Factorization

Determine whether each number is prime or composite.

- |       |        |
|-------|--------|
| 1. 29 | 6. 27  |
| 2. 77 | 7. 38  |
| 3. 67 | 8. 90  |
| 4. 69 | 9. 71  |
| 5. 51 | 10. 37 |

Find the prime factorization of the numbers using factor trees.

Express the final answer using exponents.

- |        |         |
|--------|---------|
| 11. 45 | 12. 100 |
|--------|---------|

Find the GCF of each set of numbers.

- |             |               |
|-------------|---------------|
| 13. 18, 30  | 14. 60, 45    |
| 15. 100, 30 | 16. 4, 20, 45 |

Find the LCM of each set of numbers.

- |           |             |
|-----------|-------------|
| 17. 4, 6  | 18. 8, 20   |
| 19. 9, 12 | 20. 3, 5, 6 |

1. Log into SchoolNet and find the Unit 1 Test  
Select "Review Test" option

Write down the problem numbers that you missed

2. Go into Google Classroom and open the unit test
3. Correct the problems you missed following directions:

Test Corrections:

Fold paper into 8 sections

Write the problem number in the top left corner

Redo the problem showing work or explain

**NO WORK NO CREDIT!**

You may use your notes for test corrections

IXL

6th grade

E.6, E.7, E.8