

1.7

Prime and Composite Numbers
For Simplifying Fractions

Name _____

1. A prime number has exactly two factors. It is only divisible by one and itself. List some examples of prime numbers.

7, 5, 3, 11, 13, 17, 2
 7:1 5:1 3:1
 only even prime

2. A composite number has more than two factors. List some examples of composite numbers.

24 4 8, 12, 45
 $\frac{24}{1 \cdot 24}$ $\frac{4}{1 \cdot 4}$
 $\frac{24}{2 \cdot 12}$ $\frac{4}{2 \cdot 2}$
 3:8 4:6
 odd can be composite

3. There is one number that is neither prime nor composite. What is it?

$\frac{1}{1 \cdot 1}$

4. Cross out all of the composite numbers and circle all of the prime numbers in the table.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

5. What patterns can you observe in the table?

anything even except 2 is composite
 except 5, any number ending in 5 or 0 is composite

6. How is the concept of prime and composite useful for reducing fractions?

$\frac{4}{17}$ $\frac{7}{14} = \frac{1}{2}$ $\frac{14}{7} = \frac{2}{1} = 2$