Name Jack Date _____

1. Record the factors of the given numbers as multiplication sentences and as a list in order from least to greatest. Classify each as prime (P) or composite (C). The first problem is done for you.

	Multiplication Sentences	Factors	P or C
a.	4 1×4=4 2×2=4	The factors of 4 are: 1,2, and 4	C
b.	6 1×6=6 2×3=6	The factors of 6 are: 1,2,3,6	C
c.	7 1×7=7	The factors of 7 are: 1,7	P
d.	9 1×9=9 3×3=9	The factors of 9 are: 1,3,9	C
e.	12 1×12=12 2×6=12 3×4=12	The factors of 12 are: 1,2,3,4,6,12	C
f.	13 1×13=13	The factors of 13 are: 1,13	P
g.	15 1×15=15 3×5=15	The factors of 15 are: 1,3,5,15	C
h.	16 1×16=16 2×8=16 4×4=16	The factors of 16 are: 1,2,4,8,16	C
i.	18 1×18=18 2×9=18 3×6=18	The factors of 18 are: 1,2,3,6,9,18	C
j.	19 1×19=19	The factors of 19 are: 1,19	P
k.	21 1×21=21 3×7=21	The factors of 21 are: 1,3,7,21	C
l.	24 1×24=24 4×6=24 2×12=24 3×8=24	The factors of 24 are: 1,2,3,4,6,8,12,24	C

2. Find all factors for the following numbers and classify as prime or composite. Explain your classification of each as prime or composite.

Factor Pairs for 25	
1	25
5	5

Composite
more than 2 factors

Factor Pairs for 28	
1	28
2	14
4	7

Composite
more than 2 factors

Factor Pairs for 29	
1	29

prime
only 2 factors

3. Bryan says all prime numbers are odd numbers.
   a. List all of the prime numbers less than 20 in numerical order.

2, 3, 5, 7, 11, 13, 17, 19

   b. Use your list to show that Bryan's claim is false.

Bryan's claim is false because 2 is a prime number but it is an even number.

4. Sheila has 28 stickers to divide evenly among 3 friends. She thinks there will be no leftovers. Use what you know about factor pairs to explain if Sheila is correct.

Sheila is incorrect. 3 is not a factor of 28. She would be able to give 9 stickers to each friend and there would be one left over.