**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_**

**Worksheet 7**

**Directions: Answer each question with “Yes” or “No” and state a divisibility rule from your notes as a reason for that answer. You may use a calculator to verify your answer.**

1. Is 5,126 divisible by 4? 2. Is 6,327divisible by 3?
2. Is 514,532 divisible by 6? 4. Is 103,242 divisible by 6?
3. Is 184,327 divisible by 9? 6. Is 274,901 divisible by 7?
4. Is 20,488 divisible by 8? 8. Is 11,199 divisible by 11?
5. Is 12,164 divisible by 11? 10. Is 318,512 divisible by 12?

11.**True or False**: 75 |1512***.* True or False:**6 | 12

13.**“**Every odd number greater than 5 can be written as the sum of three primes.” Show that this is a true statement by writing 27 as the sum of three prime numbers.

**Determine if the following are Prime or Composite: Show how you determined your answer.**

14. 523 15. 993 16. 451

17. List the factors of 2000.

18. List the prime factorization of 2000.

19. Find the number of positive divisors of 3,000,000.

20. Every composite whole number can be expressed as the product of primes in exactly one way except for the order of the factors of the product is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.