

# Prime and Composite Numbers

**P 3-2**

Tell whether each number is prime or composite.

1. 65 \_\_\_\_\_                      2. 97 \_\_\_\_\_
3. 53 \_\_\_\_\_                      4. 116 \_\_\_\_\_

Write the prime factorization of each number.

5. 80 \_\_\_\_\_                      6. 22 \_\_\_\_\_
7. 84 \_\_\_\_\_                      8. 124 \_\_\_\_\_

9. **Number Sense** Is the sum of two prime numbers always a prime number? Use an example in your answer.

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Maria and Josh created a code using prime numbers as substitutes for letters.

Prime Number Code				
A	B	C	D	E
2	3	5	7	11
F	G	H		
13	17	19		

10. If Maria and Josh used consecutive prime numbers to substitute for the letters of the alphabet, what number should they use for the letter *I*?

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11. Using this system, what number should Maria and Josh use to substitute for the letter *K*?

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## Test Prep

12. Which of the following correctly shows the prime factorization of 324?

A.  $2^4 \times 3^2$                       B.  $2^2 \times 9^2$                       C.  $2^2 \times 3^3$                       D.  $2^2 \times 3^4$

13. **Writing in Math** Are more prime numbers even or odd? Explain your answer.

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