1. Composite; it has more than two factors, 1, 3, 9, and 27.
2. Prime; it has only two factors, 1 and 19.
3. Prime; it has only two factors, 1 and 31.
4. Composite; it has more than two factors, 1, 2, 19, and 38.
5. Composite; it has more than two factors, 1, 3, 5, 9, 15, and 45.
6. Prime; it has only two factors, 1 and 53.
7. Composite; it has more than two factors, 1, 3, 29, and 87.
8. Composite; it has more than two factors, 1, 3, 31, and 93.

9. 2^3	10. 7^2	11. $2 \cdot 17$
12. $2 \cdot 3 \cdot 7$	13. $2^3 \cdot 3^2 \cdot 5$	14. $5 \cdot 23$
15. $2 \cdot 3 \cdot 31$	16. $3^3 \cdot 23$	17. 5
18. 7	19. 25	20. 3
21. $7c$	22. $3y^2$	23. $6c^3$
24. $2mn$	25. prime	26. neither

27. composite; 7^2
28. composite; $2 \cdot 3^2 \cdot 29$

29. 8 groups	30. 2	31. 1
32. 18	33. 4	34. 3
35. 13	36. z	37. $30a$
38. xy	39. a^2b	40. c^2df
41. 1	42. C	

43. Answers may vary. Sample: 6, 30
44. 42 chairs

45. composite; $11 \cdot 23$

46. composite; $3^2 \cdot 5^2 \cdot 7$

47. composite; $17 \cdot 59$

48. prime

49. Yes; the GCF is 1.

50. No; the GCF is 3.

51. No; the GCF is 13.

52. Yes; the GCF is 1.

53. No; the GCF is 13.

54. Yes; the GCF is 1.

55. Yes; the GCF is 1.

56. No; the GCF is 6.

57. Answers may vary. Sample: Divide 50 by the prime factor 5, and then divide the quotient, 10, by the prime factor 5 in a factor tree. Write the prime factorization $2 \cdot 5^2$.