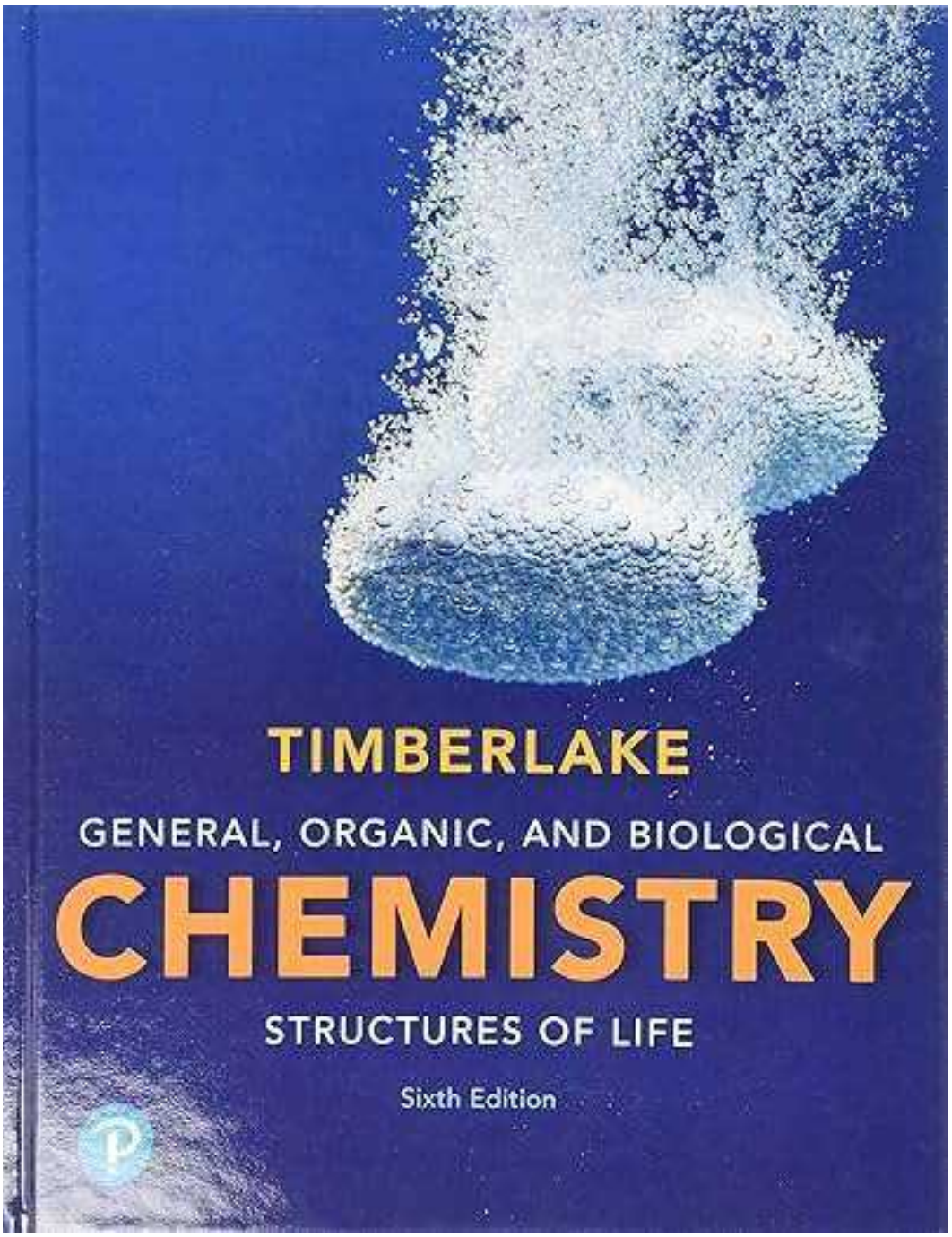
TEST BANK

General Organic and Biological Chemistry Structures of Life

Karen Timberlake

6th Edition



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Chapter 1 Chemistry in Our Lives

1.1 Multiple-Choice Questions

1) Water, H_2O, is an example of a(n)
A) chemical.
B) type of energy.
C) wave.
D) electric charge.
E) element.
Answer: A
Objective: 1.1
Global Outcomes: GO2

2) In this list, which substance can be classified as a chemical?
A) salt
B) sleep
C) cold
D) heat
E) temperature
Answer: A
Objective: 1.1
Global Outcomes: GO2

3) One example of a chemical used in toothpaste is
A) chlorine.
B) sulfur.
C) carbon dioxide.
D) calcium carbonate.
E) sugar.
Answer: D
Objective: 1.1
Global Outcomes: GO2

4) Which of the following is NOT a chemical?
A) salt
B) water
C) light
D) carbon dioxide
E) sugar
Answer: C
Objective: 1.1
Global Outcomes: GO2

5) Sodium fluorophosphate is a chemical used in toothpaste to
A) make the paste white.
B) disinfect the toothbrush.
C) keep the paste from spoiling.
D) remove plaque.
E) strengthen tooth enamel.
Answer: E
Objective: 1.1
Global Outcomes: GO2

6) Titanium dioxide is a chemical used in toothpaste to
A) make the toothpaste white.
B) disinfect the toothbrush.
C) keep the paste from spoiling.
D) remove plaque.
E) strengthen tooth enamel.
Answer: A
Objective: 1.1
Global Outcomes: GO2

7) When a part of the body is injured, substances called _____ are released.
A) aspirins
B) pain relievers
C) nitrogen oxides
D) chlorofluorocarbons
E) prostaglandins
Answer: E
Objective: 1.1
Global Outcomes: GO2

8) Which of the following is a chemical?
A) sugar
B) heat
C) light
D) noise
E) sound
Answer: A
Objective: 1.1
Global Outcomes: GO2

9) You notice that there is more traffic between 8:00 and 9:00 AM. This would be a(n)
A) observation.
B) hypothesis.
C) experiment.
D) conclusion/theory.
Answer: A
Objective: 1.2
Global Outcomes: GO1

10) There is more traffic between 8:00 and 9:00 AM because most people start work at 9:00 AM. This would be a(n)
A) observation.
B) hypothesis.
C) experiment.
D) conclusion/theory.
Answer: B
Objective: 1.2
Global Outcomes: GO1

11) In order to enhance your learning in chemistry, you should NOT
A) study a little every day.
B) form a study group.
C) go to professor's office hours.
D) be an active learner.
E) wait until the night before the exam to study.
Answer: E
Objective: 1.3
Global Outcomes: GO2

12) Which of the following would NOT be part of a study plan to learn chemistry?
A) study a little every day
B) skip your professor's office hours
C) form a study group
D) read the chapter before class
E) work the sample problems
Answer: B
Objective: 1.3
Global Outcomes: GO2

13) In the number 12.3**4**5, the 4 is in the _____ place.
A) tens
B) ones
C) tenths
D) hundredths
E) thousandths
Answer: D
Objective: 1.4
Global Outcomes: GO4

14) In the number **1**2.345, the 1 is in the _____ place.
A) tens
B) ones
C) tenths
D) hundredths
E) thousandths
Answer: A
Objective: 1.4
Global Outcomes: GO4

15) In the number 12.**3**45, the 3 is in the _____ place.
A) tens
B) ones
C) tenths
D) hundredths
E) thousandths
Answer: C
Objective: 1.4
Global Outcomes: GO4

16) The product of (-4) × (-5) is
A) -20
B) .20
C) -1
D) .1
E) 0
Answer: B
Objective: 1.4
Global Outcomes: GO4

17) For the equation $4x + 2 = 10$, x equals
A) 8
B) 12
C) 3
D) 2
E) -2
Answer: D
Objective: 1.4
Global Outcomes: GO4

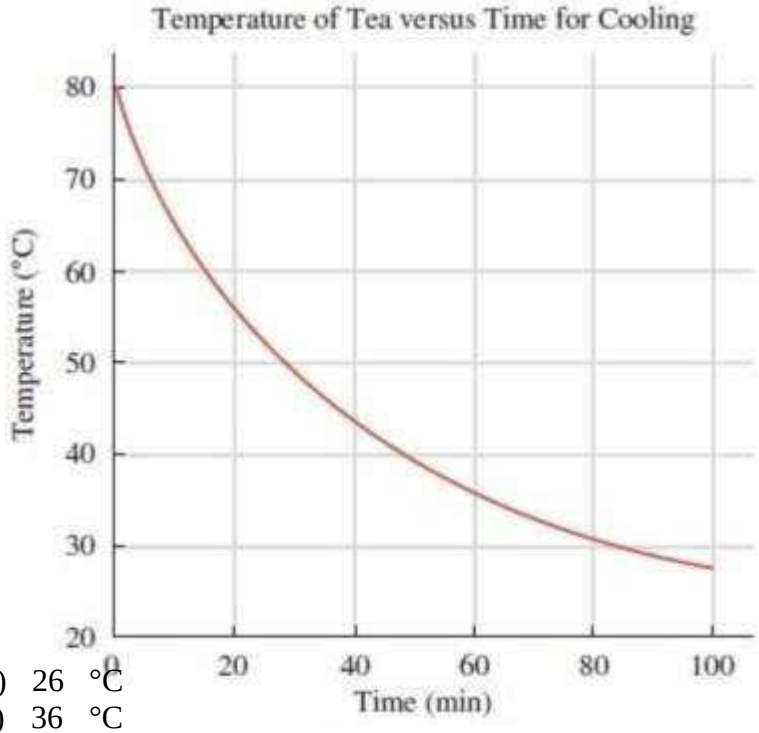
18) For the equation $6y - 20 = -2$, y equals
A) 2
B) -3
C) 3
D) 4
E) -2
Answer: C
Objective: 1.4
Global Outcomes: GO4

19) For the equation : -10 - (-4) =
A) 6
B) -6
C) 14
D) -14
E) 4
Answer: B
Objective: 1.4
Global Outcomes: GO4

20) 12 is what percentage of 36?
A) 3%
B) 30%
C) 33%
D) 330%
E) 12%
Answer: C
Objective: 1.4
Global Outcomes: GO4

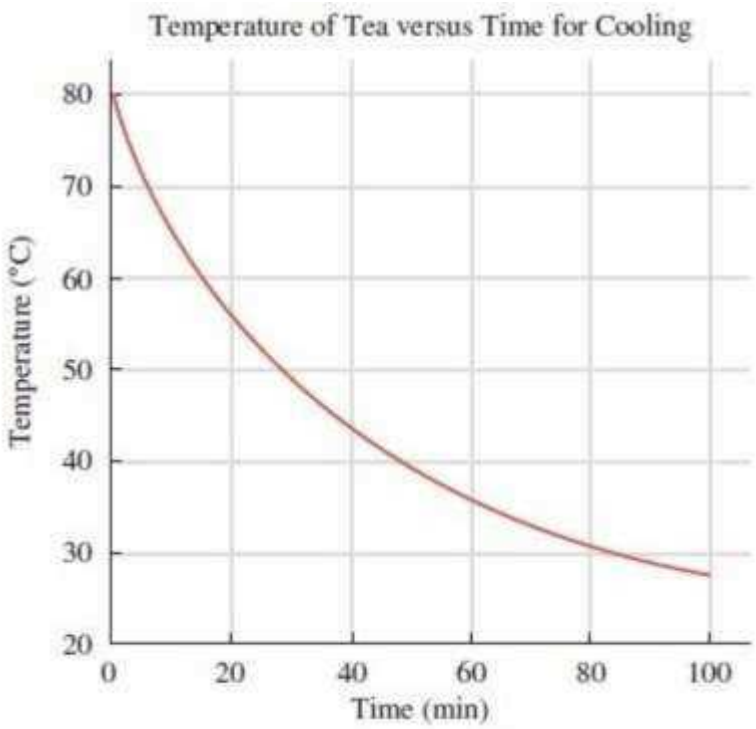
21) 16 is what percentage of 80?
A) 200%
B) 20%
C) 2%
D) 5%
E) 50%
Answer: B
Objective: 1.4
Global Outcomes: GO4

22) On the graph, what is the temperature after 40 minutes?



A) 26 °C
B) 36 °C
C) 40 °C
D) 44 °C
E) 57 °C
Answer: D
Objective: 1.4
Global Outcomes: GO4

23) On the graph, how long does it take to cool to from 80 °C go 45 °C?



A) 25 min
B) 35 min
C) 42 min
D) 60 min
E) 75 min
Answer: C
Objective: 1.4
Global Outcomes: GO4

24) Written in scientific notation, 540 000 is
A) 0.54×10^{6}.
B) 54×10^{8}.
C) 5.4×10^{-5}.
D) 5.4×10^{5}.
E) 5.4.
Answer: D
Objective: 1.5
Global Outcomes: GO4

25) Written in scientific notation, 8300 is
A) 8.3×10^{2}.
B) 8.3×10^{3}.
C) 8.3×10^{4}.
D) 8.3×10^{-3}.
E) 8.3×10^{-2}.
Answer: B
Objective: 1.5
Global Outcomes: GO4

26) Written in scientific notation, 0.000 000 33 is
A) 3.3×10^{7}.
B) 3.3×10^{-7}.
C) 3.3×10^{-8}.
D) 3.3×10^{8}.
E) 3.3.
Answer: B
Objective: 1.5
Global Outcomes: GO4

27) Written in scientific notation, 0.000 004 03 is
A) 4.03×10^{-7}.
B) 4.03×10^{-6}.
C) 4.03×10^{6}.
D) 0.403×10^{-5}.
E) 4.03.
Answer: B
Objective: 1.5
Global Outcomes: GO4

1.2 Short Answer Questions

1) A substance that always has the same composition and properties is called a(n) _____.
Answer: chemical
Objective: 1.1
Global Outcomes: GO2

2) Any material used in or produced by a chemical reaction is a(n) _____.
Answer: chemical
Objective: 1.1
Global Outcomes: GO2