Exam

Name_____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) In the number 12.345, the 3 is in the _____ place.   1) _____
   A) tens
   B) ones
   C) tenths
   D) hundredths
   E) thousandths
   Answer: C
   Diff: 0   Type: MC

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

2) In the number 123.45, the digit 5 is in the hundreds place.   2) _____
   Answer: True   ● False
   Diff: 0   Type: TF

3) Paracelsus was a Greek philosopher.   3) _____
   Answer: True   ● False
   Diff: 0   Type: TF

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

4) In order to enhance your learning in chemistry, you should NOT   4) _____
   A) be an active learner.
   B) form a study group.
   C) go to professor's office hours.
   D) study a little every day.
   E) wait until the night before the exam to study.
   Answer: E
   Diff: 0   Type: MC

5) There is more traffic between 8:00 and 9:00 AM because most people start work at 9:00 AM. This   5) _____
   would be a(n)
   A) observation.   B) hypothesis.
   C) conclusion/theory.   D) experiment.
   Answer: B
   Diff: 0   Type: MC

6) One example of a chemical used in toothpaste is   6) _____
   A) sulfur.
   B) calcium carbonate.
   C) carbon dioxide.
   D) sugar.
   E) chlorine.
   Answer: B
   Diff: 0   Type: MC

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TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

7) Keeping a problem notebook will help you do well in your chemistry class.   7) _____

Answer: ● True   False
Diff: 0   Type: TF

8) If 12 students in a class of 36 students got an "A" grade on the exam, 33% of the students earned an   8) _____
"A".

Answer: ● True   False
Diff: 0   Type: TF

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

9) Which of the following would NOT be part of a study plan to learn chemistry?   9) _____
A) form a study group
B) work the sample problems
C) read the chapter before class
D) study a little every day
E) skip your professor's office hours

Answer: E
Diff: 0   Type: MC

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

10) You should always look at the given answer to a problem before you attempt to solve the problem.   10) _____

Answer: True   ● False
Diff: 0   Type: TF

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

11) 40 students complete the first semester chemistry course. If 32 students take the second   11) _____
semester class, ____% are taking this class.

Answer: 80
Diff: 0   Type: SA

12) An abrasive used in toothpaste is _____.   12) _____

Answer: calcium carbonate
Diff: 0   Type: SA

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

13) Written in scientific notation, 8300 is   13) _____
A) 8.3×10^2.   B) 8.3×10^{-2}.   C) 8.3×10^3.   D) 8.3×10^4.   E) 8.3×10^{-3}.

Answer: C
Diff: 0   Type: MC

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

14) Express using scientific notation: 0.000 000 050   14) _____

Answer: 5.0×10^{-8}
Diff: 0   Type: SA

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

15) Which of the following is NOT a chemical?   15) _____
    A) sugar
    B) salt
    C) carbon dioxide
    D) water
    E) light

Answer: E

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

16) The substances released when tissues are injured are _____.   16) _____

Answer: prostaglandins

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

17) In the number 123.45, the digit 3 is in the ones place.   17) _____

Answer: ✔ True   False

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

18) When a part of the body is injured, substances called _____ are released.   18) _____
    A) pain relievers
    B) chlorofluorocarbons
    C) prostaglandins
    D) nitrogen oxides
    E) aspirins

Answer: C

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

19) Titanium dioxide in toothpaste is used as a detergent.   19) _____

Answer: True   ✔ False

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

20) The chemical used to make cans and foil is _____.   20) _____

Answer: aluminum

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

21) 3.5×10^3 is equal to 3500.   21) _____

Answer: ✔ True   False

22) Doing experiments to test your hypothesis is part of the scientific method.   22) _____

    Answer: ● True   False
    Diff: 0   Type: TF

23) When -7 is added to -5 the answer is 12.   23) _____

    Answer: True   ● False
    Diff: 0   Type: TF

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

24) The first step in the scientific method is to _____.   24) _____

    Answer: make observations
    Diff: 0   Type: SA

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

25) Working with a group of students can help you learn chemistry.   25) _____

    Answer: ● True   False
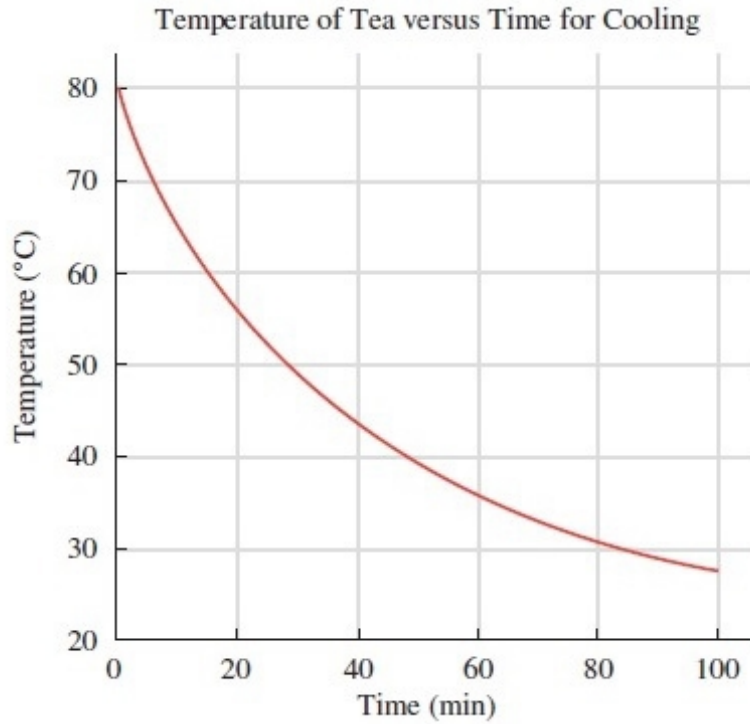   Diff: 0   Type: TF

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

26) Written in scientific notation, 540 000 is   26) _____
    A) 0.54×10^6.   B) 5.4×10^5.   C) 54×10^8.   D) 5.4.   E) 5.4×10^{-5}.
    Answer: B
    Diff: 0   Type: MC

27) You notice that there is more traffic between 8:00 and 9:00 AM. This would be a(n)   27) _____
    A) experiment.   B) hypothesis.
    C) observation.   D) conclusion/theory.
    Answer: C
    Diff: 0   Type: MC

28) On the graph, how long does it take to cool to from 80 °C go 45 °C?   28) _____

Temperature of Tea versus Time for Cooling

A) 75 min   B) 42 min   C) 60 min   D) 25 min   E) 35 min

Answer: B
Diff: 0   Type: MC

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

29) Calcium carbonate is used to sweeten toothpaste.   29) _____

Answer: True   ✔ False
Diff: 0   Type: TF

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

30) Titanium dioxide is a chemical used in toothpaste to   30) _____
   A) make the toothpaste white.
   B) remove plaque.
   C) strengthen tooth enamel.
   D) disinfect the toothbrush.
   E) keep the paste from spoiling.

Answer: A
Diff: 0   Type: MC

31) 16 is what percentage of 80?   31) _____
   A) 2%   B) 50%   C) 20%   D) 200%   E) 5%

Answer: C
Diff: 0   Type: MC

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

32) The first step in the scientific method is to draw a conclusion.

32) _____

Answer: True   ✔ False
Diff: 0   Type: TF

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

33) Written in scientific notation, 0.000 004 03 is

33) _____

A) 0.403×10^{-5}.
B) 4.03×10^{-6}.
C) 4.03.
D) 4.03×10^{6}.
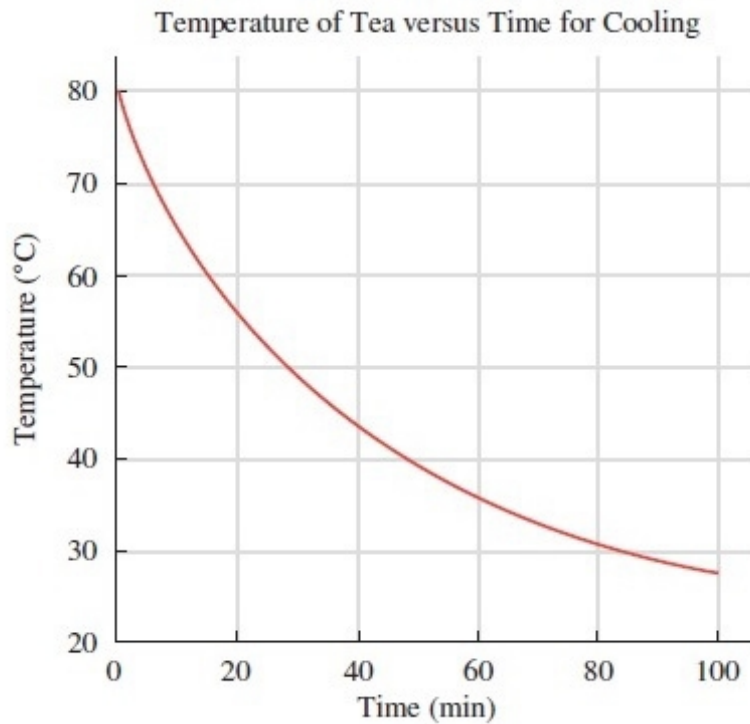E) 4.03×10^{-7}.

Answer: B
Diff: 0   Type: MC

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

34) _____

Temperature of Tea versus Time for Cooling

A) 44 °C   B) 40 °C   C) 26 °C   D) 57 °C   E) 36 °C

Answer: A
Diff: 0   Type: MC

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

35) Express using scientific notation: 351 000 000 000

35) _____

Answer: 3.51×10^{11}
Diff: 0   Type: SA

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TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

36) If −2x = 8, x is equal to 4.   36) _____

    Answer: True   ✅ False
    Diff: 0   Type: TF

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

37) 12 is what percentage of 36?   37) _____
    A) 33%   B) 30%   C) 12%   D) 3%   E) 330%

    Answer: A
    Diff: 0   Type: MC

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

38) A substance that always has the same composition and properties is called a(n) _____.   38) _____

    Answer: chemical
    Diff: 0   Type: SA

39) The second step in the scientific method is to _____.   39) _____

    Answer: form a hypothesis
    Diff: 0   Type: SA

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

40) 2.25×10^{-4} is equal to 22500.   40) _____

    Answer: True   ✅ False
    Diff: 0   Type: TF

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

41) Sodium fluorophosphate is a chemical used in toothpaste to   41) _____
    A) disinfect the toothbrush.
    B) remove plaque.
    C) strengthen tooth enamel.
    D) make the paste white.
    E) keep the paste from spoiling.

    Answer: C
    Diff: 0   Type: MC

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

42) Express using scientific notation: 5 207 000   42) _____

    Answer: 5.207×10^{6}
    Diff: 0   Type: SA

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

43) In the number 12.345, the 1 is in the _____ place.   43) _____
   A) tens
   B) ones
   C) tenths
   D) hundredths
   E) thousandths
   Answer: A
   Diff: 0   Type: MC

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

44) It is a good idea to wait until the night before an exam to start to study.   44) _____
   Answer: True   ✓ False
   Diff: 0   Type: TF

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

45) The product of (-4) × (-5) is   45) _____
   A) .1   B) -1   C) .20   D) -20   E) 0
   Answer: C
   Diff: 0   Type: MC

46) For the equation 6y - 20 = -2 , y equals   46) _____
   A) -2   B) 4   C) 3   D) 2   E) -3
   Answer: C
   Diff: 0   Type: MC

47) In this list, which substance can be classified as a chemical?   47) _____
   A) heat
   B) temperature
   C) salt
   D) cold
   E) sleep
   Answer: C
   Diff: 0   Type: MC

48) In the number 12.345, the 4 is in the _____ place.   48) _____
   A) tens
   B) ones
   C) tenths
   D) hundredths
   E) thousandths
   Answer: D
   Diff: 0   Type: MC

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

49) Any material used in or produced by a chemical reaction is a(n) _____.   49) _____

Answer: chemical

50) Express using scientific notation: 0.000 860   50) _____

Answer: 8.60×10^{-4}

51) In the number 45.678, the digit 6 is in the _____ place.   51) _____

Answer: tenths

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

52) Water, H_2O, is an example of a(n)   52) _____
   A) type of energy.
   B) chemical.
   C) wave.
   D) electric charge.
   E) element.

Answer: B

53) For the equation : $-10 - (-4) =$ 53) _____
   A) 4   B) -6   C) 6   D) 14   E) -14

Answer: B

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

54) If a negative number is divided by another negative number, the answer will be a positive number.   54) _____

Answer: ✓ True   False

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

55) Which of the following is a chemical?   55) _____
   A) heat   B) sugar   C) sound   D) noise   E) light

Answer: B

56) For the equation $4x + 2 = 10$, x equals   56) _____
   A) 8   B) 3   C) 12   D) 2   E) -2

Answer: D

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

57) If one experiment is successful, your hypothesis becomes a scientific theory.   57) _____

   Answer: True   ● False
   Diff: 0   Type: TF

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

58) Written in scientific notation, 0.000 000 33 is   58) _____

   A) 3.3×10^{-7}.   B) 3.3×10^{-8}.   C) 3.3.   D) 3.3×10^{7}.   E) 3.3×10^{8}.

   Answer: A
   Diff: 0   Type: MC

1) C

2) FALSE

3) FALSE

4) E

5) B

6) B

7) TRUE

8) TRUE

9) E

10) FALSE

11) 80

12) calcium carbonate

13) C

14) 5.0×10^{-8}

15) E

16) prostaglandins

17) TRUE
    Diff: 0   Page Ref: 1.4
    Topic:

18) C
    Diff: 0   Page Ref: 1.1
    Topic:

19) FALSE
    Diff: 0   Page Ref: 1.1
    Topic:

20) aluminum
    Diff: 0   Page Ref: 1.1
    Topic:

21) TRUE
    Diff: 0   Page Ref: 1.4
    Topic:

22) TRUE
    Diff: 0   Page Ref: 1.2
    Topic:

23) FALSE
    Diff: 0   Page Ref: 1.4
    Topic:

24) make observations
    Diff: 0   Page Ref: 1.2
    Topic:

25) TRUE
    Diff: 0   Page Ref: 1.3
    Topic:

26) B
    Diff: 0   Page Ref: 1.1
    Topic:

27) C
    Diff: 0   Page Ref: 1.1
    Topic:

28) B
    Diff: 0   Page Ref: 1.1
    Topic:

29) FALSE
    Diff: 0   Page Ref: 1.1
    Topic:

30) A
    Diff: 0   Page Ref: 1.1
    Topic:

31) C
    Diff: 0   Page Ref: 1.1
    Topic:

32) FALSE
    Diff: 0   Page Ref: 1.2
    Topic:

33) B
   Diff: 0   Page Ref: 1.1
   Topic:

34) A
   Diff: 0   Page Ref: 1.1
   Topic:

35) 3.51×10^{11}
   Diff: 0   Page Ref: 1.4
   Topic:

36) FALSE
   Diff: 0   Page Ref: 1.4
   Topic:

37) A
   Diff: 0   Page Ref: 1.1
   Topic:

38) chemical
   Diff: 0   Page Ref: 1.1
   Topic:

39) form a hypothesis
   Diff: 0   Page Ref: 1.2
   Topic:

40) FALSE
   Diff: 0   Page Ref: 1.4
   Topic:

41) C
   Diff: 0   Page Ref: 1.1
   Topic:

42) 5.207×10^{6}
   Diff: 0   Page Ref: 1.4
   Topic:

43) A
   Diff: 0   Page Ref: 1.1
   Topic:

44) FALSE
   Diff: 0   Page Ref: 1.3
   Topic:

45) C
   Diff: 0   Page Ref: 1.1
   Topic:

46) C
   Diff: 0   Page Ref: 1.1
   Topic:

47) C
   Diff: 0   Page Ref: 1.1
   Topic:

48) D
   Diff: 0   Page Ref: 1.1
   Topic:

49) chemical
   Diff: 0   Page Ref: 1.1
   Topic:

50) 8.60×10^{-4}
   Diff: 0   Page Ref: 1.4
   Topic:

51) tenths
   Diff: 0   Page Ref: 1.2
   Topic:

52) B
   Diff: 0   Page Ref: 1.1
   Topic:

53) B
   Diff: 0   Page Ref: 1.1
   Topic:

54) TRUE
   Diff: 0   Page Ref: 1.4
   Topic:

55) B
   Diff: 0   Page Ref: 1.1
   Topic:

56) D
   Diff: 0   Page Ref: 1.1
   Topic:

57) FALSE
   Diff: 0   Page Ref: 1.2
   Topic:

58) A
   Diff: 0   Page Ref: 1.1
   Topic: