

Exam

Name _____

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

- 1) For the equation $6y - 20 = -2$, y equals 1) _____
A) 4 B) -3 C) -2 D) 3 E) 2

Answer: D
Diff: 0 Type: MC

- 2) In the number 12.345, the 4 is in the _____ place. 2) _____
A) tens
B) ones
C) tenths
D) hundredths
E) thousandths

Answer: D
Diff: 0 Type: MC

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

- 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) go to professor's office hours.
B) wait until the night before the exam to study.
C) form a study group.
D) study a little every day.
E) be an active learner.

Answer: B
Diff: 0 Type: MC

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

- 5) A substance that always has the same composition and properties is called a(n) _____. 5) _____

Answer: chemical
Diff: 0 Type: SA

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

- 6) Which of the following would NOT be part of a study plan to learn chemistry? 6) _____
- A) skip your professor's office hours
 - B) study a little every day
 - C) form a study group
 - D) read the chapter before class
 - E) work the sample problems

Answer: A

Diff: 0 Type: MC

- 7) Written in scientific notation, 0.000 000 33 is 7) _____
- A) 3.3×10^7 .
 - B) 3.3×10^8 .
 - C) 3.3×10^{-8} .
 - D) 3.3×10^{-7} .
 - E) 3.3.

Answer: D

Diff: 0 Type: MC

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

- 8) Working with a group of students can help you learn chemistry. 8) _____

Answer: True False

Diff: 0 Type: TF

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

- 9) Express using scientific notation: 0.000 000 050 9) _____

Answer: 5.0×10^{-8}

Diff: 0 Type: SA

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

- 10) When a part of the body is injured, substances called _____ are released. 10) _____
- A) chlorofluorocarbons
 - B) pain relievers
 - C) nitrogen oxides
 - D) aspirins
 - E) prostaglandins

Answer: E

Diff: 0 Type: MC

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

- 11) If $-2x = 8$, x is equal to 4. 11) _____

Answer: True False

Diff: 0 Type: TF

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

- 12) The substances released when tissues are injured are _____. 12) _____

Answer: prostaglandins

Diff: 0 Type: SA

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

- 13) You notice that there is more traffic between 8:00 and 9:00 AM. This would be a(n) 13) _____
A) observation. B) hypothesis.
C) conclusion/theory. D) experiment.

Answer: A

Diff: 0 Type: MC

- 14) Which of the following is a chemical? 14) _____
A) heat B) noise C) light D) sound E) sugar

Answer: E

Diff: 0 Type: MC

- 15) One example of a chemical used in toothpaste is 15) _____
A) carbon dioxide.
B) sugar.
C) calcium carbonate.
D) chlorine.
E) sulfur.

Answer: C

Diff: 0 Type: MC

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

- 16) 3.5×10^3 is equal to 3500. 16) _____

Answer: True False

Diff: 0 Type: TF

- 17) If a negative number is divided by another negative number, the answer will be a positive number. 17) _____

Answer: True False

Diff: 0 Type: TF

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

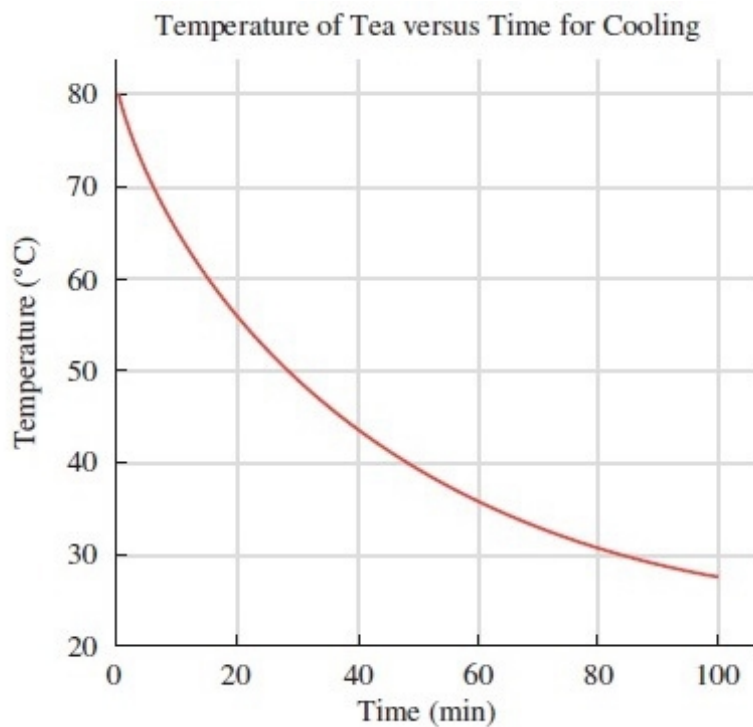
- 18) Water, H₂O, is an example of a(n) 18) _____
A) chemical.
B) element.
C) type of energy.
D) wave.
E) electric charge.

Answer: A

Diff: 0 Type: MC

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

19) _____



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

Answer: E

Diff: 0 Type: MC

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

20) Express using scientific notation: 5 207 000

20) _____

Answer: 5.207×10^6

Diff: 0 Type: SA

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

21) In this list, which substance can be classified as a chemical?

21) _____

- A) sleep
- B) heat
- C) temperature
- D) cold
- E) salt

Answer: E

Diff: 0 Type: MC

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

22) Express using scientific notation: 351 000 000 000

22) _____

Answer: 3.51×10^{11}

Diff: 0 Type: SA

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

- 23) 12 is what percentage of 36? 23) _____
A) 3% B) 330% C) 30% D) 12% E) 33%

Answer: E
Diff: 0 Type: MC

- 24) Which of the following is NOT a chemical? 24) _____
A) light
B) water
C) carbon dioxide
D) salt
E) sugar

Answer: A
Diff: 0 Type: MC

- 25) The product of $(-4) \times (-5)$ is 25) _____
A) 0 B) -1 C) .1 D) -20 E) .20

Answer: E
Diff: 0 Type: MC

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

- 26) Any material used in or produced by a chemical reaction is a(n) _____. 26) _____

Answer: chemical
Diff: 0 Type: SA

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

- 27) In the number 12.345, the 1 is in the _____ place. 27) _____
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.

- 28) You should always look at the given answer to a problem before you attempt to solve the problem. 28) _____

Answer: True False
Diff: 0 Type: TF

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

- 29) The second step in the scientific method is to _____. 29) _____

Answer: form a hypothesis
Diff: 0 Type: SA

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

30) Titanium dioxide in toothpaste is used as a detergent.

30) _____

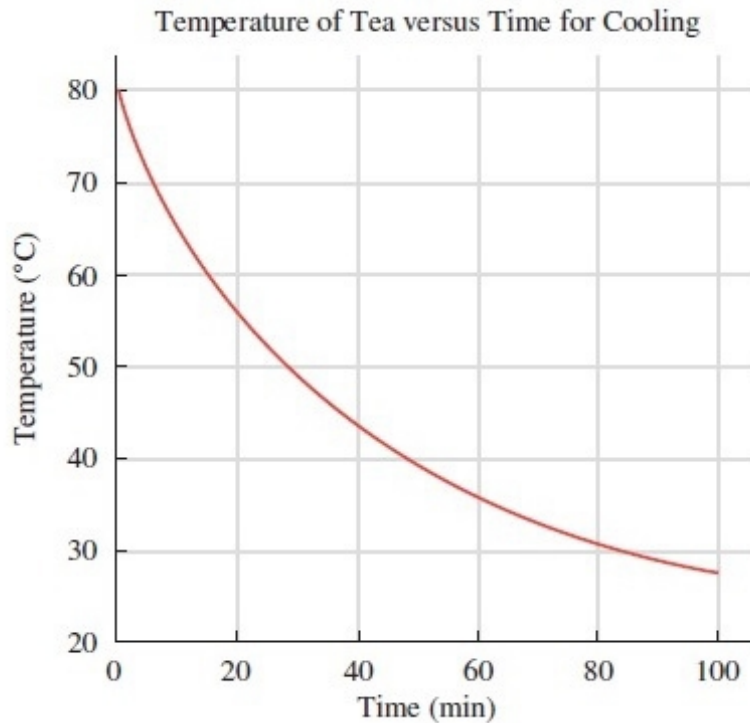
Answer: True False

Diff: 0 Type: TF

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

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

31) _____



A) 26 °C

B) 44 °C

C) 57 °C

D) 36 °C

E) 40 °C

Answer: B

Diff: 0 Type: MC

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

32) Express using scientific notation: 0.000 860

32) _____

Answer: 8.60×10^{-4}

Diff: 0 Type: SA

33) 40 students complete the first semester chemistry course. If 32 students take the second semester class, ____% are taking this class.

33) _____

Answer: 80

Diff: 0 Type: SA

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

- 34) Written in scientific notation, 540 000 is 34) _____
A) 5.4×10^{-5} . B) 5.4. C) 54×10^8 . D) 0.54×10^6 . E) 5.4×10^5 .

Answer: E
Diff: 0 Type: MC

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

- 35) When -7 is added to -5 the answer is 12. 35) _____

Answer: True False
Diff: 0 Type: TF

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

- 36) An abrasive used in toothpaste is _____. 36) _____

Answer: calcium carbonate
Diff: 0 Type: SA

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

- 37) Written in scientific notation, 8300 is 37) _____
A) 8.3×10^{-3} . B) 8.3×10^3 . C) 8.3×10^{-2} . D) 8.3×10^4 . E) 8.3×10^2 .

Answer: B
Diff: 0 Type: MC

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

- 38) If one experiment is successful, your hypothesis becomes a scientific theory. 38) _____

Answer: True False
Diff: 0 Type: TF

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

- 39) Sodium fluorophosphate is a chemical used in toothpaste to 39) _____

- A) remove plaque.
- B) keep the paste from spoiling.
- C) make the paste white.
- D) strengthen tooth enamel.
- E) disinfect the toothbrush.

Answer: D
Diff: 0 Type: MC

- 40) Titanium dioxide is a chemical used in toothpaste to 40) _____

- A) keep the paste from spoiling.
- B) disinfect the toothbrush.
- C) strengthen tooth enamel.
- D) make the toothpaste white.
- E) remove plaque.

Answer: D
Diff: 0 Type: MC

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

- 41) Keeping a problem notebook will help you do well in your chemistry class. 41) _____
Answer: True False
Diff: 0 Type: TF

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

- 42) Written in scientific notation, 0.000 004 03 is 42) _____
A) 4.03×10^{-6} .
B) 0.403×10^{-5} .
C) 4.03.
D) 4.03×10^{-7} .
E) 4.03×10^6 .
Answer: A
Diff: 0 Type: MC

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

- 43) In the number 45.678, the digit 6 is in the _____ place. 43) _____
Answer: tenths
Diff: 0 Type: SA
- 44) The first step in the scientific method is to _____. 44) _____
Answer: make observations
Diff: 0 Type: SA

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

- 45) 16 is what percentage of 80? 45) _____
A) 5% B) 2% C) 20% D) 200% E) 50%
- Answer: C
Diff: 0 Type: MC
- 46) For the equation : $-10 - (-4) =$ 46) _____
A) 4 B) -14 C) 14 D) 6 E) -6
- Answer: E
Diff: 0 Type: MC

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

- 47) The chemical used to make cans and foil is _____. 47) _____
Answer: aluminum
Diff: 0 Type: SA

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

- 48) It is a good idea to wait until the night before an exam to start to study. 48) _____
Answer: True False
Diff: 0 Type: TF

49) In the number 123.45, the digit 3 is in the ones place. 49) _____
Answer: True False
Diff: 0 Type: TF

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

50) In the number 12.345, the 3 is in the _____ place. 50) _____
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.

51) Doing experiments to test your hypothesis is part of the scientific method. 51) _____
Answer: True False
Diff: 0 Type: TF

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

52) For the equation $4x + 2 = 10$, x equals 52) _____
A) 2 B) -2 C) 8 D) 3 E) 12
Answer: A
Diff: 0 Type: MC

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

53) The first step in the scientific method is to draw a conclusion. 53) _____
Answer: True False
Diff: 0 Type: TF

54) If 12 students in a class of 36 students got an "A" grade on the exam, 33% of the students earned an "A". 54) _____
Answer: True False
Diff: 0 Type: TF

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

55) 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) 55) _____
A) hypothesis. B) observation.
C) experiment. D) conclusion/theory.
Answer: A
Diff: 0 Type: MC

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

56) Calcium carbonate is used to sweeten toothpaste.

56) _____

Answer: True False

Diff: 0 Type: TF

57) 2.25×10^{-4} is equal to 22500.

57) _____

Answer: True False

Diff: 0 Type: TF

58) In the number 123.45, the digit 5 is in the hundreds place.

58) _____

Answer: True False

Diff: 0 Type: TF

Answer Key
Testname: CH1

- 1) D
Diff: 0 Page Ref: 1.1
Topic:
- 2) D
Diff: 0 Page Ref: 1.1
Topic:
- 3) FALSE
Diff: 0 Page Ref: 1.2
Topic:
- 4) B
Diff: 0 Page Ref: 1.1
Topic:
- 5) chemical
Diff: 0 Page Ref: 1.1
Topic:
- 6) A
Diff: 0 Page Ref: 1.1
Topic:
- 7) D
Diff: 0 Page Ref: 1.1
Topic:
- 8) TRUE
Diff: 0 Page Ref: 1.3
Topic:
- 9) 5.0×10^{-8}
Diff: 0 Page Ref: 1.4
Topic:
- 10) E
Diff: 0 Page Ref: 1.1
Topic:
- 11) FALSE
Diff: 0 Page Ref: 1.4
Topic:
- 12) prostaglandins
Diff: 0 Page Ref: 1.1
Topic:
- 13) A
Diff: 0 Page Ref: 1.1
Topic:
- 14) E
Diff: 0 Page Ref: 1.1
Topic:
- 15) C
Diff: 0 Page Ref: 1.1
Topic:
- 16) TRUE
Diff: 0 Page Ref: 1.4
Topic:

Answer Key
Testname: CH1

- 17) TRUE
Diff: 0 Page Ref: 1.4
Topic:
- 18) A
Diff: 0 Page Ref: 1.1
Topic:
- 19) E
Diff: 0 Page Ref: 1.1
Topic:
- 20) 5.207×10^6
Diff: 0 Page Ref: 1.4
Topic:
- 21) E
Diff: 0 Page Ref: 1.1
Topic:
- 22) 3.51×10^{11}
Diff: 0 Page Ref: 1.4
Topic:
- 23) E
Diff: 0 Page Ref: 1.1
Topic:
- 24) A
Diff: 0 Page Ref: 1.1
Topic:
- 25) E
Diff: 0 Page Ref: 1.1
Topic:
- 26) chemical
Diff: 0 Page Ref: 1.1
Topic:
- 27) A
Diff: 0 Page Ref: 1.1
Topic:
- 28) FALSE
Diff: 0 Page Ref: 1.3
Topic:
- 29) form a hypothesis
Diff: 0 Page Ref: 1.2
Topic:
- 30) FALSE
Diff: 0 Page Ref: 1.1
Topic:
- 31) B
Diff: 0 Page Ref: 1.1
Topic:
- 32) 8.60×10^{-4}
Diff: 0 Page Ref: 1.4
Topic:

Answer Key

Testname: CH1

- 33) 80
Diff: 0 Page Ref: 1.2
Topic:
- 34) E
Diff: 0 Page Ref: 1.1
Topic:
- 35) FALSE
Diff: 0 Page Ref: 1.4
Topic:
- 36) calcium carbonate
Diff: 0 Page Ref: 1.1
Topic:
- 37) B
Diff: 0 Page Ref: 1.1
Topic:
- 38) FALSE
Diff: 0 Page Ref: 1.2
Topic:
- 39) D
Diff: 0 Page Ref: 1.1
Topic:
- 40) D
Diff: 0 Page Ref: 1.1
Topic:
- 41) TRUE
Diff: 0 Page Ref: 1.3
Topic:
- 42) A
Diff: 0 Page Ref: 1.1
Topic:
- 43) tenths
Diff: 0 Page Ref: 1.2
Topic:
- 44) make observations
Diff: 0 Page Ref: 1.2
Topic:
- 45) C
Diff: 0 Page Ref: 1.1
Topic:
- 46) E
Diff: 0 Page Ref: 1.1
Topic:
- 47) aluminum
Diff: 0 Page Ref: 1.1
Topic:
- 48) FALSE
Diff: 0 Page Ref: 1.3
Topic:

Answer Key

Testname: CH1

- 49) TRUE
Diff: 0 Page Ref: 1.4
Topic:
- 50) C
Diff: 0 Page Ref: 1.1
Topic:
- 51) TRUE
Diff: 0 Page Ref: 1.2
Topic:
- 52) A
Diff: 0 Page Ref: 1.1
Topic:
- 53) FALSE
Diff: 0 Page Ref: 1.2
Topic:
- 54) TRUE
Diff: 0 Page Ref: 1.4
Topic:
- 55) A
Diff: 0 Page Ref: 1.1
Topic:
- 56) FALSE
Diff: 0 Page Ref: 1.1
Topic:
- 57) FALSE
Diff: 0 Page Ref: 1.4
Topic:
- 58) FALSE
Diff: 0 Page Ref: 1.4
Topic: