HOLT CALIFORNIA

Physical Science

Study Guide A
with Directed Reading Worksheets

HOLT, RINEHART AND WINSTON
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TO THE STUDENT

Study Guide

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1 2 3 4 5 6 7 054 11 10 09 08 07 06

Contents

The Chemistry of Living Things

Matter in Motion

Forces and Motion

Forces in Fluids

Stars, Galaxies, and the Universe

Our Solar System

APPLYING THE ANSWERS

Saving Lives

_____ **7.** [illegible]

a. [illegible]

b. [illegible]

Skills Worksheet

Directed Reading A

Section: Scientific Methods

WHAT ARE SCIENTIFIC METHODS?

Write the letter of the correct answer in the space provided.

_____ **1.**

continuedc o n t i

Use the terms from the following list to complete the sentences below.

18. _____

_____.

19. _____

_____.

20. _____

_____

Analyzing *Pro e*

_____ **25.** *Proteus*

a.
b.
c.
d.

DRAWING CONCLUSIONS

_____ **26.**

a.
b.
c.
d.

The *Proteus* Conclusion

_____ **27.** *Proteus*

a.
b.
c.
d.

COMMUNICATING RESULTS

_____ **28.**

a.
b.
c.
d.

_____ **29.** *Proteus*

a.
b.
c.
d.

Skills Worksheet

Directed Reading A

Section: Safety in Science (pp. 22–27)

KEEPING YOURSELF SAFE

Write the letter of the correct answer in the space provided.

_____ **1.**

a.
b.
c.
d.

Avoiding Accidents

_____ **2.**

a.
b.
c.
d.

Reporting Accidents

_____ **3.**

a.
b.
c.
d.

ELEMENTS OF SAFETY

Understanding Safety Symbols

_____ **4.**

a.
b.
c.
d.

Match each safety symbol with the correct meaning. Write the letter in the space provided.

_____ **5.** 

_____ **6.** 

_____ **7.** 

a.
b.
c.

Following Safety Symbols

_____ **8.** [illegible]?

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **9.** [illegible]?

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Following Directions

_____ **10.** [illegible]?

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **11.** [illegible]?

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Neatness

_____ **12.** [illegible]?

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Using Proper Safety Equipment

_____ **13.** [illegible]?

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Skills Worksheet

Vocabulary and Section Summary A

Science and Scientists

VOCABULARY

In your own words, write a definition of the following term in the space provided.

1. [illegible]

_____

_____

SECTION SUMMARY

Read the following section summary.

- [illegible]
- [illegible]
- [illegible]
- [illegible]

Skills Worksheet

Vocabulary and Section Summary A

Scientific Methods

VOCABULARY

In your own words, write a definition of the following term in the space provided.

Skills Worksheet

Vocabulary and Section Summary A

Safety in Science

VOCABULARY

In your own words, write a definition of the following term in the space provided.

1. [illegible]

_____

_____

SECTION SUMMARY

Read the following section summary.

- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]

Skills Worksheet

Directed Reading A

Section: Tools and Models in Science (pp. 42–49)

Write the letter of the correct answer in the space below.

_____ **1.**

a.
b.
c.
d.

TOOLS IN SCIENCE

_____ **2.**

a.
b.
c.
d.

_____ **3.**

a.
b.
c.
d.

MAKING MEASUREMENTS

_____ **4.**

a.
b.
c.
d.

The International System of Units

_____ **5.**

a.
b.
c.
d.

_____ **6.** [illegible]

Temperature

Write the letter of the correct answer in the space below.

_____ **16.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **17.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

MODELS IN SCIENCE

_____ **18.** [illegible]

Models: The Right Size

Write the letter of the correct answer in the space below.

_____ **24.**

a.
b.
c.
d.

The Limits of Models

_____ **25.**

a.
b.
c.
d.

USING MODELS FOR SCIENTIFIC PROGRESS

_____ **26.**

a.
b.
c.
d.

SCIENTIFIC THEORIES

Match the correct definition with the correct term. Write the letter in the space provided.

_____ **27.**

_____ **28.**

_____ **29.**

a.
b.
c.

Skills Worksheet

Directed Reading A

Section: Organizing Your Data

CREATING A DATA TABLE

Write the letter of the correct answer in the space below.

_____ **1.** [illegible]

a. [illegible]

b. [illegible]

c. [illegible]

d. [illegible]

Organizing: The First Step

_____ **2.** [illegible]

Variable and Controlled Parameters

_____ **7.** [illegible]

a. [illegible]

b. [illegible]

c. [illegible]

d. [illegible]

CREATING A GRAPH

_____ **8.** [illegible]

a. [illegible]

b. [illegible]

c. [illegible]

d. [illegible]

_____

_____

_____

_____

_____

_____

REPRODUCIBILITY OF DATA

_____ **6.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

DESCRIBING THE ENTIRE SET OF DATA

_____ **7.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible] 1 5 6 . 4 2 1 5 4 5 7

_____ **8.** [illegible]

Skills Worksheet

Vocabulary and Section Summary A

Tools and Models in Science

VOCABULARY

In your own words, write a definition of the following terms in the space provided.

1.

2.

3.

4.

5.

6.

7.

Skills Worksheet

Vocabulary and Section Summary A

Skills Worksheet

Vocabulary and Section Summary A

Analyzing Your Data

VOCABULARY

In your own words, write a definition of the following terms in the space provided.

1.

2.

3.

4.

SECTION SUMMARY

Read the following section summary.

- [illegible]
- [illegible]
-

_____ **6.** [illegible]

a. [illegible] ( )
b. [illegible] ( )
c. [illegible] ( )
d. [illegible] ( )

Measuring the Volume of Liquids

Use the terms from the following list to complete the sentences below.

7. [illegible] _____.

8. [illegible] _____ [illegible].

9. [illegible] _____ [illegible] ,
[illegible] , [illegible] .

Volume of an Irregularly Shaped Solid Object

Use the terms from the following list to complete the sentences below.

[illegible] ( )

10. [illegible] _____,
[illegible] .

11. [illegible] $(1 \quad ^3)$ [illegible]
[illegible] _____.

12. [illegible] , [illegible]
[illegible] _____.

MATTER AND MASS

Write the letter of the correct answer in the space provided.

_____ **13.** [illegible] ?

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **14.**

a.

b.

c.

d.

_____ **15.**

a.

b.

c.

d.

The Difference Between Mass and Weight

_____ **16.**

a.

b.

c.

d.

_____ **17.**

a.

b.

c.

d.

_____ **18.**

a.

b.

c.

d.

Measuring Mass and Weight

_____ **19.** 100

a. 1

b. 1 2

c. 1

d. 1.

Use the terms from the following list to complete the sentences below.

20. _____.

21. _____.

22. _____.

Skills Worksheet

Directed Reading A

Section: Physical Properties (pp. 84–89)

Write the letter of the correct answer in the space provided.

_____ **1.**

a.
b.
c.
d.

IDENTIFYING PHYSICAL PROPERTIES

_____ **2.**

a.
b.
c.
d.

Match the correct example with the correct property. Write the letter in the space provided.

_____ **3.**
_____ **4.**
_____ **5.**

a.
b.
c.

Match the correct example with the correct property. Write the letter in the space provided.

_____ **6.**
_____ **7.**
_____ **8.**

a.
b.
c.

Density

Write the letter of the correct answer in the space provided.

_____ **9.**

a.
b.
c.
d.

_____ **10.** (*m*) (*V*),

a. $D = m \times V$

b. $D = \frac{m}{V}$

c. $D = \frac{V}{m}$

d. $D = V \div m$

_____ **11.**

a.
b.
c. 0 0 11.279 10.7 0 0 11.2797495_09

Density of Solids

_____ **15.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Density, Floating, and Sinking

_____ **16.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Liquid Layers

_____ **17.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **18.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

PHYSICAL CHANGES: NO NEW SUBSTANCES

Use the terms from the following list to complete the sentences below.

19. [illegible]

_(a) _____.

20. [illegible] _____ [illegible].

21. [illegible] _____ [illegible].

Examples of Physical Changes

Write the letter of the correct answer in the space provided.

_____ **22.**

a.
b.
c.
d.

_____ **23.**

a.
b.
c.
d.

Reversibility of Physical Changes

_____ **24.**

a.
b.
c.
d.

Matter and Physical Changes

_____ **25.**

a.
b.
c.
d.

Skills Worksheet

Directed Reading A

Section: Chemical Properties

IDENTIFYING CHEMICAL PROPERTIES

Use the terms from the following list to complete the sentences below.

1. _____ ( ) _____.

2. _____.

3. _____.

4. _____.

Comparing Physical and Chemical Properties

Write the letter of the correct answer in the space provided.

_____ **5.**

a.
b.
c.
d.

_____ **6.**

a.
b.
c.
d.

_____ **7.**

a.
b.
c.
d.

_____ **8.**

a.
b.
c.
d.

Characteristic Properties

_____ **9.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

CHEMICAL CHANGES AND NEW SUBSTANCES

_____ **10.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Use the terms from the following list to complete the sentences below.

11. _____ [illegible]

12. _____ [illegible]

What Happens During a Chemical Change?

Write the letter of the correct answer in the spceg3iCvide d.

Signs of Chemical Changes

_____ **15.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Matter and Chemical Changes

_____ **16.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

PHYSICAL VERSUS CHEMICAL CHANGES

_____ **17.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **18.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **19.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Reversing Changes

_____ **20.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Skills Worksheet

Vocabulary and Section Summary A

What Is Matter?

VOCABULARY

In your own words, write a definition of the following terms in the space provided.

1. _____

_____

2. _____

_____

3. _____

_____

4. _____

_____

5. _____

_____

SECTION SUMMARY

Read the following section summary.

- _____
- _____
- _____
- _____ ( ). _____ ( ).
- _____ ( ).

Skills Worksheet

Vocabulary and Section Summary A

Physical Properties

VOCABULARY

In your own words, write a definition of the following terms in the space provided.

1. [illegible]

_____

_____

_____

2. [illegible]

_____

_____

_____

3. [illegible]

_____

_____

_____

SECTION SUMMARY

Read the following section summary.

- [illegible]
- [illegible]

Skills Worksheet

Vocabulary and Section Summary A

Chemical Properties

VOCABULARY

In your own words, write a definition of the following terms in the space provided.

1. [illegible]

_____

_____

_____

2. [illegible]

_____

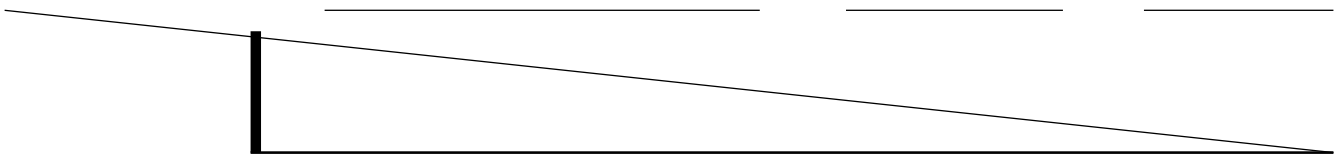
_____

_____

SECTION SUMMARY

Read the following section summary.

- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]



_____ 8. [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

GASES

_____ 9. [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ 10. [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ 11. [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

PLASMAS

_____ 12. [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ 13. [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ 14. [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Skills Worksheet

Directed Reading A

Section: Changes of State

ENERGY AND CHANGES OF STATE

EVAPORATION: LIQUID TO GAS

_____ 12. [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Evaporation and Boiling

_____ 13. [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ 14. [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Effects of Pressure on Boiling Point

_____ 15. [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

CONDENSATION: GAS TO LIQUID

_____ 16. [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ 17. [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

SUBLIMATION: SOLID TO GAS

_____ **18.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **19.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

TEMPERATURE AND CHANGES OF STATE

_____ **20.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Skills Worksheet

Vocabulary and Section Summary A

Four States of Matter

VOCABULARY

In your own words, write a definition of the following terms in the space provided.

1. _____

_____

_____

2. _____

_____

_____

3. _____

_____

_____

4. _____

_____

_____

5. _____

_____

_____

SECTION SUMMARY

Read the following section summary.

- _____
- _____
- _____

Skills Worksheet

Vocabulary and Section Summary A

Changes of State

VOCABULARY

In your own words, write a definition of the following terms in the space provided.

1.

2.

3.

4.

5.

6.

SECTION SUMMARY

Read the following section summary.

- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]

Skills Worksheet

Directed Reading A

Section: Elements

Identifying Elements by Their Properties

Match the correct description with the correct term. Write the letter in the space provided.

_____ **6.** [illegible]

_____ **7.** [illegible]

_____ **8.** [illegible]

_____ **9.** [illegible] 1,495

a. [illegible]

b. [illegible]

c. [illegible]

d. [illegible]

GROUPING ELEMENTS

Categories of Elements

Use the terms from the following list to complete the sentences below.

[illegible]

10. _____ [illegible].

11. [illegible] _____.

12. [illegible] _____.

13. [illegible] _____.

Categories Are Similar

Match the correct description with the correct term. Write the letter in the space provided.

_____ **14.** [illegible]

_____ **15.** [illegible]

_____ **16.** [illegible]

_____ **17.** [illegible]

a. [illegible]

b. [illegible]

c. [illegible]

d. [illegible]

Match the correct description with the correct term. Write the letter in the space provided.

_____ **18.** [illegible]

_____ **19.** [illegible]

_____ **20.** [illegible]

a. [illegible]

b. [illegible]

c. [illegible]

Skills Worksheet

Directed Reading A

Section: Compounds

Write the letter of the correct answer in the space provided.

_____ **1.** [illegible] 3 03([illegible])6.3([illegible]) [illegible]

a. [illegible] 2.

b. [illegible]) / 1 1 [illegible]

c. .([illegible]) / 1 1 [illegible].

d. [illegible] 2 1 1 [illegible] .3( )-0 78. 0. 78. 0.01 0.3( )-0.57

COMPOUNDS: MADE OF ELEMENT550.57n3R578.Tm 0.0001 Tc 0.1413 Tw [copper)]TJ /F1 1 Tf -5

Properties: Compounds Versus Elements

_____ **6.** [illegible]

a. [illegible]

b. [illegible]

c. [illegible]

d. [illegible]

The Ratio of Elements in a Compound

_____ **7.** [illegible]

a. [illegible]

b. [illegible]

d./F1Industr6.3(ue0 -127143 5D20.0)41(rTw it5 Tm -- 0.02lett)1.23pace provide1.1111 nd i

_____

_____

_____

Compounds in Nature

_____ **12.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **13.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **14.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Skills Worksheet

Directed Reading A

Section: Mixtures

PROPERTIES OF MIXTURES

Use the terms from the following list to complete the sentences below.

1. _____.
2. _____.
3. _____.
4. _____.

Separating Mixtures Through Physical Methods

Match the correct description with the correct term. Write the letter in the space provided.

_____ 5.

_____ 6.

_____ 7.

_____ 8.

SOLUTIONS

_____ **10.**

a.

b.

c.

d.

_____ **11.**

a.

b.

c.

d.

_____ **12.**

a.

b.

c.

d.

_____ **13.**

a.

b.

c.

d.

Use the terms from the following list to complete the sentences below.

14. _____.

15. _____.

16. _____.

17. _____.

18. _____.

CONCENTRATION OF SOLUTIONS

Write the letter of the correct answer in the space provided.

_____ **19.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **20.** [illegible]

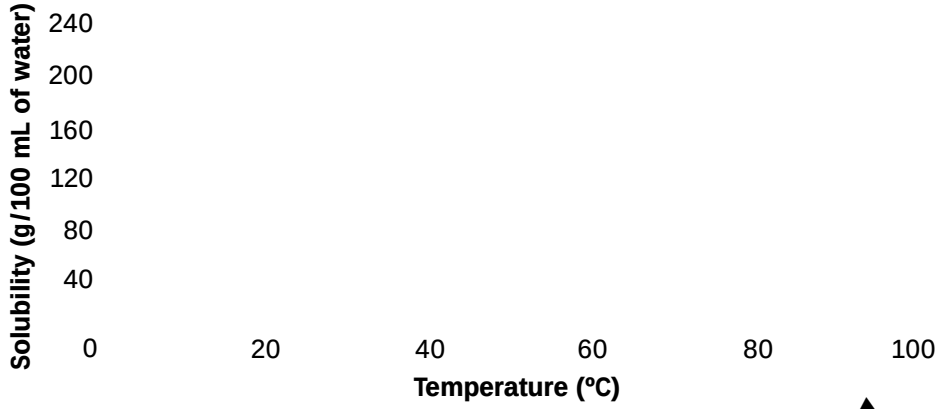
a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **21.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Solubility

Use the graph below to answer questions 22 and 23. Write the letter of the correct answer in the space provided.



_____ **22.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **23.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Skills Worksheet

Vocabulary and Section Summary A

Elements

VOCABULARY

In your own words, write a definition of the following terms in the space provided.

1. [illegible]

2. [illegible]

3. [illegible]

4. [illegible]

5. [illegible]

SECTION SUMMARY

Read the following section summary.

- [illegible]
- [illegible]
- [illegible]
- [illegible]

Skills Worksheet

Vocabulary and Section Summary A

Compounds

VOCABULARY

In your own words, write a definition of the following term in the space provided.

1. [illegible]

_____

_____

_____

SECTION SUMMARY

Read the following section summary.

- [illegible]
- [illegible]
- [illegible]
- [illegible]

SECTION SUMMARY

Read the following section summary.

- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]

Skills Worksheet

Directed Reading A

Section: Development of the Atomic Theory (pp. 164–171)

THE BEGINNING OF ATOMIC THEORY

Write the letter of the correct answer in the space provided.

_____ **1.** 440

a.
b.
c.
d.

_____ **2.** *atom*

a.
b.
c.
d.

_____ **3.**

a.
b.
c.
d.

DALTON'S ATOMIC THEORY BASED ON EXPERIMENTS

_____ **4.**

a.
b.
c.
d.

_____ **5.** 1800

a.
b.
c.
d.

THOMSON'S DISCOVERY OF ELECTRONS

_____ **6.**

a.
b.
c.
d.

Use the terms from the following list to complete the sentences below.

7. _____

8. _____

_____

Skills Worksheet

Directed Reading A

Section: The Atom (pp. 172–179)

THE PARTS OF AN ATOM

Subatomic Particles

_____ 1. [illegible] *subatomic particles*?

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

The Nucleus

_____ 2. [illegible]?

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Match the correct description with the correct term. Write the letter in the space provided.

_____ 3. [illegible]

_____ 4. [illegible]

_____ 5. [illegible]

_____ 6. [illegible]

_____ 7. [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]
e. [illegible]

Outside the Nucleus

_____ 8. [illegible]?

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Properties of Isotopes

_____ **18.** [illegible]
a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

The Difference Between Isotopes

_____ **19.** [illegible]
a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **20.** [illegible] 5 [illegible], 6 [illegible], [illegible] 5 [illegible]?
a. 1
b. 11
c. 10
d. 16

Naming Isotopes

_____ **21.** [illegible] 12?
a. [illegible] -8
b. [illegible] -12
c. [illegible] -6
d. [illegible] -18

Isotopes and Atomic Mass

_____ **22.** [illegible]
a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Skills Worksheet

Vocabulary and Section Summary A

Development of the Atomic Theory

VOCABULARY

In your own words, write a definition of the following terms in the space provided.

1. [illegible]

2. [illegible]

3. [illegible]

4. [illegible]

SECTION SUMMARY

Read the following section summary.

- [illegible] 1.

Skills Worksheet

Vocabulary and Section Summary A

The Atom

VOCABULARY

Skills Worksheet

Directed Reading A

Section: Arranging the Elements (pp. 194–201)

DISCOVERING A PATTERN

Write the letter of the correct answer in the space provided.

_____ **1.**

a.
b.
c.
d.

Periodic Properties of the Elements

_____ **2.** *periodic*

a.
b.
c.
d.

_____ **3.**

a.
b.
c.
d.

_____ **4.**

a.
b.
c.
d.

Predicting Properties of Missing Elements

_____ **5.**

a.
b.
c.
d.

CHANGING THE ARRANGEMENT

_____ **6.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **7.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

PERIODIC TABLE OF THE ELEMENTS

_____ **8.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **9.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

THE PERIODIC TABLE AND CLASSES OF ELEMENTS

Use the terms from the following list to complete the sentences below.

_____

_____

_____

_____

DECODING THE PERIODIC TABLE

Chemical Symbols

_____

_____

_____

Atomic Number

_____ **22.**

a.

b.

c.

d.

_____ **23.**

a.

b.

c.

d.

_____ **24.**

a.

b.

c.

d.

_____ **25.**

a.

b.

c.

d.

Skills Worksheet

Directed Reading A

Section: Grouping the Elements (pp. 202–209)

Write the letter of the correct answer in the space provided.

_____ **1.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **2.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

GROUP 1: ALKALI METALS

_____ **3.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **4.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **5.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

GROUP 2: ALKALINE-EARTH METALS

_____ **6.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **7.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

GROUPS 3–12: TRANSITION METALS

_____ **8.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **9.** [illegible] 3?

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **10.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Properties of Transition Metals

_____ **11.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

GROUP 13: BORON GROUP

Use the terms from the following list to complete the sentences below.

12. [illegible] 13 _____, [illegible]

13. [illegible] _____.

14. [illegible] .279 [illegible] .27 [illegible] 1 [illegible] 9_988 [illegible] 6611. 3:

_____

_____

_____

_____

_____

_____ **21.** [illegible] 15 [illegible]

a. [illegible]

b. [illegible]

GROUP 18: NOBLE GASES

_____ **27.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **28.** [illegible] 18 [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **29.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

HYDROGEN

_____ **30.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **31.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

The Uniqueness of Hydrogen

_____ **32.** [illegible]

a. [illegible] 1
b. [illegible] 18
c. [illegible] 1
d. [illegible] 1

-0.2 5(1)9_ 93 0 0 10.7893 .97 ./ 797 0 0 1 0 7.4(76)-272 . 0 19765.1412 31 0 0 11.5

Skills Worksheet

Vocabulary and Section Summary A

Arranging the Elements

VOCABULARY

In your own words, write a definition of the following terms in the space provided.

1. [illegible]

2. [illegible]

3. [illegible]

4. [illegible]

SECTION SUMMARY

Read the following section summary.

- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]

Skills Worksheet

Vocabulary and Section Summary A

Grouping the Elements

VOCABULARY

In your own words, write a definition of the following terms in the space provided.

1. _____

_____

_____

2. _____

_____

_____

3. _____

_____

_____

4. _____

_____

_____

SECTION SUMMARY

Read the following section summary.

- [illegible] (§ 1) [illegible]
- [illegible] (§ 2) [illegible]
- [illegible] (§ 3 12) [illegible]
- § 13 16 [illegible]
- [illegible] (§ 17) [illegible]
- [illegible] (§ 18) [illegible]
- [illegible]

[illegible]

Skills Worksheet

Directed Reading A

Section: Electrons and Chemical Bonding

COMBINING ATOMS THROUGH CHEMICAL BONDING

Write the letter of the correct answer in the space provided.

_____ **1.** [illegible]

a. [illegible]

Use the terms from the following list to complete the sentences below.

7. _____.

8. _____.

9. _____

10. _____.

TO BOND OR NOT TO BOND

Write the letter of the correct answer in the space provided.

_____ **11.**
- **a.**
- **b.**
- **c.**
- **d.**

_____ **12.**
- **a.** 2
- **b.** 6
- **c.** 10
- **d.** 18

Use the terms from the following list to complete the sentences below.

13. _____.

14. _____

15. _____

16. _____

Skills Worksheet

Directed Reading A

Section: Ionic Bonds

FORMING IONIC BONDS

Write the letter of the correct answer in the space provided.

_____ **1.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Charged Particles

_____ **2.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **3.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

FORMING POSITIVE IONS

_____ **4.** [illegible] 3 [illegible]

a. 1^+
b. 3^+
c. 2^+
d. 2

The Energy of Gaining Electrons

_____ **14.** [illegible] 17 [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

FORMING IONIC COMPOUNDS

_____ **15.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **16.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

IONIC COMPOUNDS

Properties of Ionic Compounds

_____ **17.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Skills Worksheet

Directed Reading A

Section: Covalent and Metallic Bonds (pp. 236–241)

COVALENT BONDS

Write the letter of the correct answer in the space provided.

_____ **1.**
- **a.**
- **b.**
- **c.**
- **d.**

_____ **2.**
- **a.**
- **b.**
- **c.**
- **d.**

_____ **3.**
- **a.**
- **b.**
- **c.**
- **d.**

Covalent Bonds and Molecules

Match the correct description with the correct term. Write the letter in the space provided.

_____ **4.**

_____ **5.**

- **a.**
- **b.**

COVALENT COMPOUNDS AND MOLECULES

Write the letter of the correct answer in the space provided.

_____ **6.**
- **a.**
- **b.**
- **c.**
- **d.**

The Simplest Molecules

_____ **7.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **8.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **9.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **10.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

More-Complex Molecules

Use the terms from the following list to complete the sentences below.

[illegible]

11. [illegible] _____ [illegible].

12. [illegible] _____ [illegible].

13. [illegible] _____ [illegible].

14. [illegible] _____ [illegible].

METALLIC BONDS

Use the terms from the following list to complete the sentences below.

15. [illegible]

16. [illegible] _____.

_____.

Movement of Electrons Throughout a Metal

Write the letter of the correct answer in the space provided.

_____ **17.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

PROPERTIES OF METALS

_____ **18.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Match the correct definition with the correct term. Write the letter in the space provided.

_____ **19.** [illegible]

_____ **20.** [illegible]

_____ **21.** [illegible]

_____ **22.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Skills Worksheet

Vocabulary and Section Summary A

Ionic Bonds

VOCABULARY

In your own words, write a definition of the following terms in the space provided.

1. [illegible]

2. [illegible]

3. [illegible]

SECTION SUMMARY

Read the following section summary.

- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]

Skills Worksheet

Vocabulary and Section Summary A

Covalent and Metallic Bonds

VOCABULARY

In your own words, write a definition of the following terms in the space provided.

1. [illegible]

2. [illegible]

3. [illegible]

SECTION SUMMARY

Read the following section summary.

- [illegible]
- [illegible] *molecule.* [illegible]
- [illegible]
- [illegible]

Skills Worksheet

Directed Reading A

Section: Forming New Substances

Write the letter of the correct answer in the space provided.

_____ **1.** **pre1fS [**

a.

b. **pre1fS [** pre1fS **pre1fS [** . 4 1 91 (1) / 64 /24.612 190.573.4407 578.0366

Use the terms from the following list to complete the sentences below.

5. _____ ( ) _____ .

6. _____ ( ) _____.

A Change of Properties

Write the letter of the correct answer in the space provided.

_____ **7.**

Skills Worksheet

Directed Reading A

Section: Chemical Formulas and Equations

CHEMICAL FORMULAS

Write the letter of the correct answer in the space provided.

_____ **1.** [illegible] ?

a. 10
b. 100
c. 200
d. 1,000

_____ **2.** [illegible] ?

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **3.** [illegible] ?

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **4.** [illegible] 2 [illegible] 2 ?

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Writing Formulas for Ionic Compounds

_____ **7.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **8.** [illegible]

a. 2
b. 1
c. 0
d. 1

CHEMICAL EQUATIONS

Describing Reactions by Using Equations

Use the terms from the following list to complete the sentences below.

9. [illegible] _____.

10. [illegible] _____.

11. [illegible] _____.

The Importance of Accuracy

Write the letter of the correct answer in the space provided.

_____ **12.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Why Equations Must Be Balanced

_____ **13.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **14.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **15.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

How to Balance an Equation

_____ **16.** [illegible] 2 2 ?

a. [illegible]
b. 2
c. 2
d. 2

_____ **17.** [illegible] ?

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **18.** [illegible] ?

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Skills Worksheet

Vocabulary and Section Summary A

Forming New Substances

VOCABULARY

In your own words, write a definition of the following terms in the space provided.

1. [illegible]

2. [illegible]

3. [illegible]

4. [illegible]

5. [illegible]

SECTION SUMMARY

Read the following section summary.

- [illegible]
- [illegible]
-

Skills Worksheet

Vocabulary and Section Summary A

Chemical Formulas and Equations

VOCABULARY

In your own words, write a definition of the following terms in the space provided.

1.

Skills Worksheet

Directed Reading A

Section: Ionic and Covalent Compounds (pp. 282–285)

Write the letter of the correct answer in the space provided.

_____ **1.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **2.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

IONIC COMPOUNDS AND THEIR PROPERTIES

Use the terms from the following list to complete the sentences below.

3. [illegible] _____.

4. [illegible] _____.

5. [illegible] _____ [illegible].

6. [illegible] _____.

Brittleness

Write the letter of the correct answer in the space provided.

_____ **7.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **8.** [illegible]

_____

_____

_____ **15.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Solubility

_____ **16.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Low Melting Points

_____ **17.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **18.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Electrical Conductivity

_____ **19.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **20.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **21.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ 8. [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ 9. [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Acids React With Metals

_____ 10. [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Acids Conduct Electric Current

_____ 11. [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Uses of Acids

Match the correct description with the correct term. Write the letter in the space provided.

_____ 12. [illegible]

_____ 13. [illegible]

_____ 14. [illegible]

_____ 15. [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

BASES AND THEIR PROPERTIES

Write the letter of the correct answer in the space provided.

_____ **16.**

a.
b.
c.
d.

_____ **17.**

a.
b.
c.
d.

Bases Have a Bitter Flavor and a Slippery Feel

_____ **18.**

a.
b.
c.
d.

_____ **19.**

a.
b.
c.
d.

Bases Change Color of Indicators

_____ **20.**

a.
b.
c.
d.

Bases Conduct Electric Current

_____ **21.**

a.
b.
c.
d.

Uses of Bases

Match the correct description with the correct term. Write the letter in the space provided.

_____ **22.** [illegible]

_____ **23.** [illegible]

_____ **24.** [illegible]

_____ **25.** [illegible]

a. [illegible]

b. [illegible]

c. [illegible]

d. [illegible]

Skills Worksheet

Directed Reading A

Section: Solutions of Acids and Bases (pp. 292–295)

STRENGTHS OF ACIDS AND BASES

Write the letter of the correct answer in the space provided.

_____ **1.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Strong Versus Weak Acids

_____ **2.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **3.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Strong Versus Weak Bases

_____ **4.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

ACIDS, BASES, AND NEUTRALIZATION

Use the terms from the following list to complete the sentences below.

5. _____

_____

6. _____

_____

Match the correct description with the correct term. Write the letter in the space provided.

_____ **13.** [illegible]

_____ **14.** [illegible]

_____ **15.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]

Using Indicators to Determine pH

Write the letter of the correct answer in the space provided.

_____ **16.** [illegible]
a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **17.** [illegible]
a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

pH and the Environment

_____ **18.** [illegible]
a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **19.** [illegible]
a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

SALTS

_____ **20.** [illegible]
a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Uses of Salts

Match the correct description with the correct term Write the letter in the space provided.

_____ **21.**

_____ **22.**

_____ **23.**

a.

b.

c.

Skills Worksheet

Vocabulary and Section Summary A

Ionic and Covalent Compounds

VOCABULARY

In your own words, write a definition of the following terms in the space provided.

1. [illegible]

2. [illegible]

3. [illegible]

SECTION SUMMARY

Read the following section summary.

- [illegible]
- [illegible]
- [illegible] *molecules.*
- [illegible]

Skills Worksheet

Vocabulary and Section Summary A

Acids and Bases

VOCABULARY

In your own words, write a definition of the following terms in the space provided.

1. _

2.

3. _

SECTION SUMMARY

Read the following section summary.

- [illegible]
-

Skills Worksheet

Vocabulary and Section Summary A

Solutions of Acids and Bases

VOCABULARY

In your own words, write a definition of the following terms in the space provided.

1. [illegible]

2. [illegible]

3. [illegible]

Skills Worksheet

Directed Reading A

Section: Elements in Living Things (pp. 310–313)

THE BONDING OF CARBON ATOMS

Write the letter of the correct answer in the space provided.

_____ **1.**

a.
b.
c.
d.

_____ **2.**

a.
b.
c.
d.

Carbon Backbones

_____ **3.**

a.
b.
c.
d.

_____ **4.**

a.
b.
c.
d.

_____ **5.**

a.
b.
c.
d.

Single Bonds

_____ **6.**

a.
b.
c.
d.

_____ **7.**

a.
b.
c.
d.

Use the terms from the following list to complete the sentences below.

8. ( ) _____

9. _____.

10. _( ) _____

11. _( ) _____.

OTHER ELEMENTS IN LIVING ORGANISMS

Write the letter of the correct answer in the space provided.

_____ **12.**
- **a.**
- **b.**
- **c.**
- **d.**

Elements in Organic Compounds

_____ **13.**
- **a.**
- **b.**
- **c.**
- **d.**

Organic Compounds—Not Just from Living Things!

_____ **14.**
- **a.**
- **b.**
- **c.**
- **d.**

_____ **15.**
- **a.**
- **b.**
- **c.**
- **d.**

_____ **8.** [illegible]

a. [illegible]

b. [illegible]

c. [illegible]

d. [illegible]

PROTEINS

Use the terms from the following list to complete the sentences below.

[illegible]

9. [illegible] _____.

10. [illegible] _____ [illegible].

11. [illegible] _____.

NUCLEIC ACIDS

Use the terms from the following list to complete the sentences below.

[illegible]

12. [illegible]

_____.

13. [illegible] _____.

14. [illegible] _____.

DNA AND RNA

Match the correct description with the correct term. Write the letter in the space provided.

_____ **15.** [illegible]

_____ **16.** [illegible]

_____ **17.** [illegible]

a. [illegible]

b. [illegible]

c. [illegible]

OTHER IMPORTANT COMPOUNDS

Water

Write the letter of the correct answer in the space provided.

_____ **18.** [illegible] 70% [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **19.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Salt

_____ **20.** [illegible]

a. [illegible]

Skills Worksheet

Vocabulary and Section Summary A

Elements in Living Things

VOCABULARY

In your own words, write a definition of the following term in the space provided.

1. [illegible]

_____

_____

_____

SECTION SUMMARY

Read the following section summary.

- [illegible]
- [illegible]
- [illegible]

Skills Worksheet

Vocabulary and Section Summary A

Compounds of Living Things

VOCABULARY

In your own words, write a definition of the following terms in the space provided.

1. [illegible]

2. [illegible]

3. [illegible]

4. [illegible]

SECTION SUMMARY

Read the following section summary.

- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]

[illegible]

Skills Worksheet

Directed Reading A

Section: Measuring Motion

Write the letter of the correct answer in the space provided.

_____ **1.** [illegible]

a. [illegible]

b. [illegible]

c. [illegible]

Speed Versus Velocity

_____ **13.**

a.
b.
c.
d.

_____ **14.**

a. 600 /
b. 600 /
c. 600 /
d. 600

Changing Velocity

_____ **15.**

a.
b.
c.
d.

ACCELERATION

Use the terms from the following list to complete the sentences below.

16. **16.** **16.**

_____

_____

_____

_____

Forces in the Same Direction

_____ **8.**

a.
b.
c.
d.

Forces in Opposite Directions

_____ **9.**

a.
b.
c.
d.

BALANCED FORCES: NO CHANGE IN MOTION

_____ **10.**

a.
b.
c.
d.

_____ **11.**

a. 0
b. 1
c. 2
d. 3

_____ **12.**

a.
b.
c.
d.

Use the terms from the following list to complete the sentences below.

13. _____.

14. _____.

15. _____

UNBALANCED FORCES: VELOCITY CHANGES

Use the terms from the following list to complete the sentences below.

16. _____, 0 .

17. _____

18. _____ .

19. _____

Unbalanced Forces and Direction of Motion

Write the letter of the correct answer in the space provided.

_____ **20.**
- **a.**
- **b.**
- **c.**
- **d.**

_____ **21.**
- **a.**
- **b.**
- **c.**
- **d.**

Skills Worksheet

Directed Reading A

Section: Friction: A Force That Opposes Motion (pp. 350–355)

Write the letter of the correct answer in the space provided.

_____ **1.**

a.
b.
c.
d.

THE SOURCE OF FRICTION

_____ **2.**

a.
b.
c.
d.

_____ **3.**

a.
b.
c.
d.

The Effect of Force on Friction

_____ **4.**

a.
b.
c.
d.

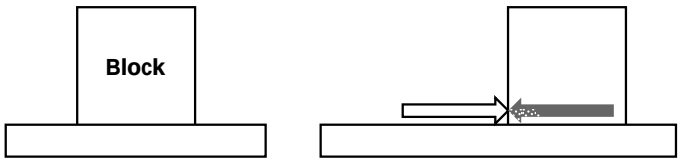
The Effect of Material on Friction

_____ **5.**

a.
b.
c.
d.

_____ **6.**

Use the figures below to answer questions 13, 14, and 15. Write the letter of the correct answer in the space provided.



_____ **13.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **14.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **15.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

FRICTION: HARMFUL AND HELPFUL

_____ **16.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **17.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Ways to Reduce Friction

_____ **18.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **19.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Ways to Increase Friction

_____ **20.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **21.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Skills Worksheet

Vocabulary and Section Summary A

Measuring Motion

VOCABULARY

In your own words, write a definition of the following terms in the space provided.

1. _____

_____

_____

2. _____

_____

_____

3. _____

_____

_____

4. _____

_____

_____

SECTION SUMMARY

Read the following section summary.

- _____
- _____
- _____
- _____
- _____
- _____
- _____

Skills Worksheet

Vocabulary and Section Summary A

Friction: A Force That Opposes Motion

VOCABULARY

In your own words, write a definition of the following term in the space provided.

1. [illegible]

_____

_____

SECTION SUMMARY

Read the following section summary.

- [illegible]
- [illegible]
- [illegible]
- [illegible]
-

WEIGHT AND GRAVITATIONAL FORCE

_____ 12. [illegible]
a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

The Differences Between Weight and Mass

_____ 13. [illegible]
a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ 14. [illegible]
a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ 15. [illegible]
a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ 16. [illegible]
a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

GRAVITY AND STATIC OBJECTS

_____ 17. [illegible]
a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ 18. [illegible]
a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Skills Worksheet

Directed Reading A

Section: Gravity and Motion

GRAVITY AND FALLING OBJECTS

Write the letter of the correct answer in the space provided.

_____ **1.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Gravity and Acceleration

_____ **2.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **3.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Acceleration and Changes in Velocity

Match the correct description with the correct term. Write the letter in the space

AIR RESISTANCE AND FALLING OBJECTS

Write the letter of the correct answer in the space provided.

_____ **10.**

a.
b.
c.
d.

_____ **11.**

a.
b.
c.
d.

Acceleration and Terminal Velocity

Match the correct description with the correct term. Write the letter in the space provided.

_____ **12.**

_____ **13.**

a.
b.

PROJECTILE MOTION AND GRAVITY

Write the letter of the correct answer in the space provided.

_____ **14.**

a.
b.
c.
d.

Horizontal Movement

_____ **15.**

a.
b.
c.
d.

Vertical Movement

_____ **16.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **17.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **18.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

ORBITING AND GRAVITY

_____ **19.** [illegible]

a. [illegible]
a. [illegible]

Skills Worksheet

Directed Reading A

Section: Newton's Laws of Motion (pp. 384–391)

NEWTON'S FIRST LAW

Part 1: Objects at Rest

Write the letter of the correct answer in the space provided.

_____ **1.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Part 2: Objects in Motion

_____ **2.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **3.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Friction and Newton's First Law

_____ **4.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **5.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Inertia and Newton's First Law

_____ **6.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **7.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **8.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Mass and Inertia

_____ **9.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

NEWTON'S SECOND LAW OF MOTION

Part 1: Acceleration Depends on Mass

_____ **10.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Part 2: Acceleration and Force

_____ **11.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Skills Worksheet

Vocabulary and Section Summary A

Gravity: A Force of Attraction

VOCABULARY

In your own words, write a definition of the following terms in the space provided.

1.

2.

3.

Skills Worksheet

Vocabulary and Section Summary A

Skills Worksheet

Vocabulary and Section Summary A

Newton's Laws of Motion

VOCABULARY

In your own words, write a definition of the following term in the space provided.

1. [illegible]

_____

_____

_____

SECTION SUMMARY

Read the following section summary.

- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]

Skills Worksheet

Directed Reading A

Section: Fluids and Pressure (pp. 406–411)

Use the terms from the following list to complete the sentences below.

[illegible]

1. [illegible] ______________________.

2. [illegible] ______________________ [illegible].

3. [illegible] ______________________ [illegible].

FLUIDS AND PRESSURE

Use the terms from the following list to complete the sentences below.

[illegible]

4. [illegible] ______________________ [illegible].

5. [illegible] ______________________.

6. [illegible] ______________________.

7. [illegible] ______________________ [illegible].

Pressure and Bubbles

Write the letter of the correct answer in the space provided.

______ **8.** [illegible]?

- **a.** [illegible]
- **b.** [illegible]
- **c.** [illegible]
- **d.** [illegible]

[illegible]

ATMOSPHERIC PRESSURE

Match the correct description with the correct term. Write the letter in the space provided.

_____ **9.**

_____ **10.**

_____ **11.**

_____ **12.**

a.

b.

c.

d. 101,300

Variation of Atmospheric Pressure

Write the letter of the correct answer in the space provided.

_____ **13.**

a.
b.
c. 12,000
d. 150,000

_____ **14.**

a.
b.
c. 12,000
d. 150,000

Atmospheric Pressure and Depth

_____ **15.**

a.
b.
c.
d.

Pressure Changes and Your Body

_____ **16.**

a.
b.
c.
d.

WATER PRESSURE

Water Pressure and Depth

_____ **17.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Density and Water Pressure

_____ **18.** [illegible]

a. 10
b. 100
c. 1,000
d. 8,000

_____ **19.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **20.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

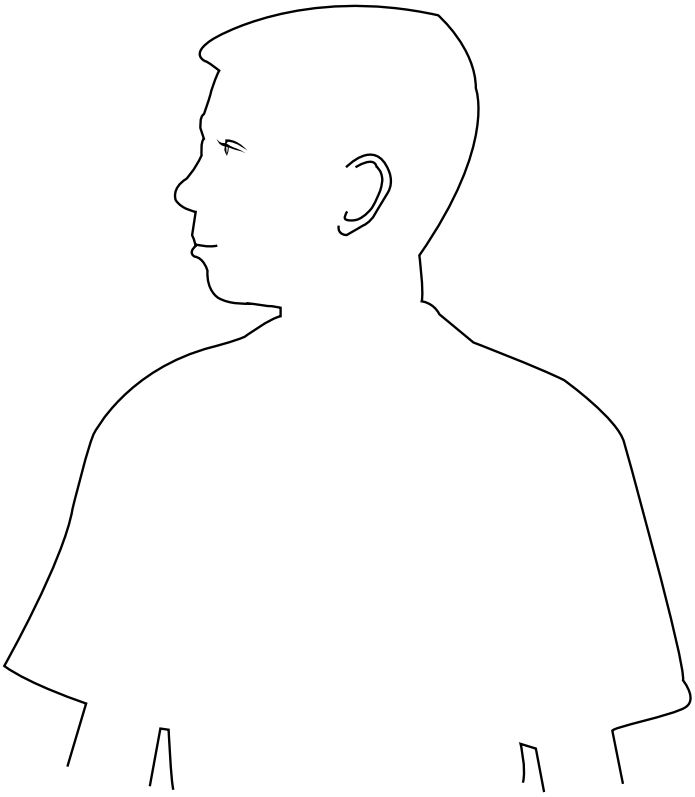
PRESSURE DIFFERENCES AND FLUID FLOW

_____ **21.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Pressure Differences and Breathing

Use the drawing below to answer questions 22 and 23. Write the letter of the correct answer in the space provided.



_____ **22.** [illegible]

a. [illegible]

b. [illegible]

c. [illegible]

d. [illegible]

_____ **23.** [illegible]

a. [illegible]).

b. [illegible]

c. [illegible]

d. [illegible] ( ).

Pressure Differences and Tornadoes

_____ **24.**

a.

b.

c.

d.

_____ **25.**

a.

b.

c.

d.

Skills Worksheet

Directed Reading A

Section: Buoyancy and Density

Write the letter of the correct answer in the space provided.

_____ **1.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

BUOYANT FORCE AND FLUID PRESSURE

Use the terms from the following list to complete the sentences below.

[illegible]

2. [illegible] _____ [illegible].

3. [illegible] _____.

4. [illegible] _____ [illegible].

WEIGHT VERSUS BUOYANT FORCE

Use the terms from the following list to complete the sentences below.

5. [illegible] _____.

6. [illegible] _____.

Sinking

Write the letter of the correct answer in the space provided.

_____ **7.** [illegible]

a. [illegible]

Floating

_____ **8.**

a.
b.
c.
d.

Buoying Up

_____ **9.**

a.
b.
c.
d.

DENSITY AND FLOATING

_____ **10.**

a.
b.
c.
d.

_____ **11.**

a.
b.
c.
d.

More Dense Than Air

_____ **12.**

a.
b.
c.
d.

Less Dense Than Air

_____ **13.**

a.
b.
c.
d.

DETERMINING DENSITY

_____ **14.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Volume of a Regular Solid

_____ **15.** [illegible] **you find the volume** [illegible] **45** [illegible] **0.7893 0** [illegible]

a. [illegible]
b. [illegible]
c. [illegible] 2.
d. _1.279 / 3 4 [illegible]

Skills Worksheet

Vocabulary and Section Summary A

Fluids and Pressure

VOCABULARY

In your own words, write a definition of the following terms in the space provided.

1. [illegible]

2. [illegible]

3. [illegible]

4. [illegible]

SECTION SUMMARY

Read the following section summary.

- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]

Skills Worksheet

Directed Reading A

Section: Stars

Write the letter of the correct answer in the space provided.

_____ **1.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

COLOR OF STARS

_____ **2.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]

Types of Spectra

Use the terms from the following list to complete the sentences below.

7. _____

_____.

8. _____

_____.

Trapping the Light: Cosmic Detective Work

Write the letter of the correct answer in the space provided.

_____ **9.**
- **a.**
- **b.**
- **c.**
- **d.**

_____ **10.**
- **a.**
- **b.**
- **c.**
- **d.**

_____ **11.**
- **a.**
- **b.**
- **c.**
- **d.**

_____ **12.**
- **a.**
- **b.**
- **c.**
- **d.**

Identifying Elements by Using Dark Lines

_____ **13.**
- **a.**
- **b.**
- **c.**
- **d.**

The Types of Elements in a Star

_____ **14.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **15.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

CLASSIFYING STARS

_____ **16.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Differences in Temperature

_____ **17.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **18.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Differences in Brightness

_____ **19.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **20.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **21.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **22.** [illegible]

a. 14
b. 1.4
c. 9.8
d. 9.8

HOW BRIGHT IS THAT STAR?

Apparent Magnitude

Use the terms from the following list to complete the sentences below.

[illegible]

23. [illegible] _____.

24. [illegible] 32.6 [illegible] _____.

DISTANCE TO THE STARS

Use the terms from the following list to complete the sentences below.

[illegible]

25. [illegible] ( ) _____.

26. [illegible] _____.

MOTIONS OF STARS

The Apparent Motion of Stars

Write the letter of the correct answer in the space provided.

_____ **27.** [illegible]

a. [illegible]

Skills Worksheet

Directed Reading A

Section: The Life Cycle of Stars

TYPES OF STARS

Write the letter of the correct answer in the space provided.

_____ **1.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **2.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

THE LIFE CYCLE OF SUNLIKE STARS

Use the terms from the following list to complete the sentences below.

_____ **3.** [illegible]

_____ **4.** [illegible]

_____ **5.** [illegible]

_____ **6.** [illegible]

A TOOL FOR STUDYING STARS

Write the letter of the correct answer in the space provided.

The H-R Diagram

_____ **9.**
- **a.**
- **b.**
- **c.**
- **d.**

_____ **10.**
- **a.**
- **b.**
- **c.**
- **d.**

_____ **11.**
- **a.**
- **b.**
- **c.**
- **d.**

_____ **12.**
- **a.**
- **b.**
- **c.**
- **d.**

Match the correct description with the correct term. Write the letter in the space provided.

_____ **13.**

_____ **14.**

_____ **15.**

_____ **16.**

- **a.**
- **b.**
- **c.**
- **d.**

THE AGING OF MASSIVE STARS

Use the terms from the following list to complete the sentences below.

17. _____ (_____)

_____.

18. _____ (_____)

_____.

19. _____ (_____)

_____.

20. _____ (_____)

_____.

Skills Worksheet

Directed Reading A

Section: Galaxies

Write the letter of the correct answer in the space provided.

_____ **1.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

TYPES OF GALAXIES

Match the correct description with the correct term. Write the letter in the space provided.

_____ **2.**

_____ **8.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

QUASARS

_____ **9.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **10.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

ORIGIN OF GALAXIES

_____ **11.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **12.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Skills Worksheet

Directed Reading A

Section: Formation of the Universe

Write the letter of the correct answer in the space provided.

_____ **1.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

THE BIG BANG THEORY

_____ **2.**

Cosmic Background Radiation

_____ 6. [illegible]
a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ 7. [illegible]
a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

GRAVITY AND THE UNIVERSE

_____ 8. [illegible]
a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ 9. [illegible]
a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

A Cosmic Repetition

_____ 10. [illegible]
a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ 11. [illegible]
a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

HOW OLD IS THE UNIVERSE?

_____ **12.** [illegible]?

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **13.** [illegible]?

a. [illegible] 12 [illegible] 13 [illegible]
b. [illegible] 12 [illegible] 13 [illegible]
c. [illegible] 12 [illegible] 13 [illegible]
d. [illegible] 12 [illegible] 13 [illegible]

A FOREVER-EXPANDING UNIVERSE?

_____ **14.** [illegible]?

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **15.** [illegible]?

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **16.** [illegible]?

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Skills Worksheet

Vocabulary and Section Summary A

Formation of the Universe

VOCABULARY

In your own words, write a definition of the following term in the space provided.

1. [illegible]

_____

_____

_____

SECTION SUMMARY

Read the following section summary.

- [illegible] 14 [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]

Skills Worksheet

Directed Reading A

Section: A Solar System Is Born (pp. 472–479)

Write the letter of the correct answer in the space provided.

_____ **1.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

THE SOLAR NEBULA

_____ **2.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **3.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **4.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Gravity Pulls Matter Together

_____ **5.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **6.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Pressure Pushes Matter Apart

Use the terms from the following list to complete the sentences below.

7. _____.

8. _____

UPSETTING THE BALANCE

Write the letter of the correct answer in the space provided.

_____ **9.**
- **a.**
- **b.**
- **c.**
- **d.**

HOW THE SOLAR SYSTEM FORMED

_____ **10.**
- **a.**
- **b.**
- **c.**
- **d.**

From Planetesimals to Planets

_____ **11.**
- **a.**
- **b.**
- **c.**
- **d.**

_____ **12.**
- **a.**
- **b.**
- **c.**
- **d.**

_____ **13.**
- **a.**
- **b.**
- **c.**
- **d.**

_____ **14.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

The Birth of a Star

_____ **15.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **16.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Nuclear Fusion

_____ **20.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Conditions Required for Fusion

_____ **21.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Fusion in the Sun

_____ **22.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

MEASURING INTERPLANTETARY DISTANCES

Match the correct description with the correct term. Write the letter in the space provided.

_____ **23.** [illegible]

_____ **24.** [illegible]

a. [illegible]
b. [illegible]

THE INNER AND OUTER SOLAR SYSTEMS

Match the correct description with the correct term. Write the letter in the space provided.

_____ **25.** [illegible]

_____ **26.** [illegible]

a. [illegible]
b. [illegible]

Skills Worksheet

Directed Reading A

Section: The Inner Planets

Write the letter of the correct answer in the space provided.

_____ **1.** [illegible] *terrestrial planets?*

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **2.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

MERCURY: CLOSEST TO THE SUN

_____ **3.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **4.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Days and Years on Mercury

_____ **5.** [illegible] 59 [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **6.** [illegible]

a. 55 [illegible]
b. 150 [illegible]
c. 88 [illegible]
d. 220 [illegible]

Match the correct description with the correct term. Write the letter in the space provided.

_____ **7.**

The Atmosphere of Venus

Write the letter of the correct answer in the space provided.

_____ **15.** [illegible]

MARS: THE RED PLANET

The Atmosphere of Mars

_____ **21.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **22.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Water on Mars

_____ **23.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Where Is the Water Now?

_____ **24.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Volcanoes on Mars

_____ **25.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **26.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

_____ **27.** *Mars Express Orbiter's*

a.

b.

c.

Skills Worksheet

Directed Reading A

Section: The Outer Planets (pp. 486–491)

Write the letter of the correct answer in the space provided.

_____ **1.**
a.
b.
c.
d.

_____ **2.**
a.
b.
c.
d.

JUPITER: A GIANT AMONG GIANTS

_____ **3.**
a.
b.
c.
d.

_____ **4.**
a.
b.
c.
d.

_____ **5.**
a.
b.
c.
d.

_____ **6.**
a.
b.
c.
d.

The Exploration of Jupiter

_____ **7.** [illegible]

a. [illegible]

b. [illegible]

URANUS: A SMALL GIANT

_____ **12.**
a.
b.
c.
d.

A Tilted Planet

_____ **13.**
a.
b. 45
c.
d.

_____ **14.**
a.
b.
c.
d.

NEPTUNE: THE BLUE WORLD

_____ **15.**
a.
b.
c.
d.

The Weather on Neptune

_____ **16.**
a.
b.
c.
d.

_____ **17.**
a. 100 /
b. 1,000 /
c. 300 /
d. 1,000 /

PLUTO: A DWARF PLANET

A Small World

_____ **18.**

a.

b.

c.

d.

_____ **19.**

a.

b.

c.

d.

Beyond Pluto

_____ **20.**

a.

b.

c.

d.

_____ **21.** 2003

a. 2003 313

b.

c.

d.

Skills Worksheet

Directed Reading A

Section: Moons

Write the letter of the correct answer in the space provided.

_____ **1.**

a.

b.

c.

_____ **7.** [illegible]

a. [illegible]

b. [illegible]

_____

_____

_____

Eclipses

Write the letter of the correct answer in the space provided.

_____ **14.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Match the correct description with the correct term. Write the letter in the space provided.

_____ **15.** [illegible]

_____ **16.** [illegible]

_____ **17.** [illegible]

_____ **18.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

The Moon's Tilted Orbit

Write the letter of the correct answer in the space provided.

_____ **19.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

THE MOONS OF OTHER PLANETS

_____ **20.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

The Moons of Mars

_____ **21.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

The Moons of Neptune

_____ **29.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

The Moon of Pluto

_____ **30.** [illegible]

a. [illegible]
b. [illegible]
c. [illegible]
d. [illegible]

Skills Worksheet

Directed Reading A

Section: Small Bodies in the Solar System

Comet Orbits

_____ **7.**

a.

b.

c.

d.

_____ **8.**

a.

b.

c.

d.

Long- and Short-Period Comets

Match the correct description with the correct term. Write the letter in the space provided.

_____ **9.** 200

_____ **10.** 200

ASTEROIDS

Use the terms from the following list to complete the sentences below.

11.

( ) _____.

_____

Skills Worksheet

Vocabulary and Section Summary A

A Solar System Is Born

VOCABULARY

In your own words, write a definition of the following terms in the space provided.

1. [illegible]

_____

_____

_____

2. [illegible]

_____

_____

_____

3. [illegible]

_____

_____

_____

SECTION SUMMARY

Read the following section summary.

- [illegible]
- [illegible] *solar nebula.* [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]

Skills Worksheet

Vocabulary and Section Summary A

The Inner Planets

VOCABULARY

In your own words, write a definition of the following terms in the space provided.

1. [illegible]

2. [illegible]

3. [illegible]

SECTION SUMMARY

Read the following section summary.

- [illegible]
- [illegible]
- [illegible] 88 [illegible]
- [illegible]
- [illegible]
- [illegible]

Skills Worksheet

Vocabulary and Section Summary A

The Outer Planets

VOCABULARY

In your own words, write a definition of the following term in the space provided.

1. _ _

_____

_____

_____

SECTION SUMMARY

Read the following section summary.

- [illegible]
- [illegible]
- [illegible] 98 [illegible]
- [illegible] 1,000 [illegible] / [illegible]

Skills Worksheet

Vocabulary and Section Summary A

Moons

VOCABULARY

In your own words, write a definition of the following terms in the space provided.

1. _

2. _

3.

SECTION SUMMARY

Read the following section summary.

- *phases.*
- 60 *Galilean moons.*
- 50 700