# Go through your textbook (*from page vi to end*) to answer all of the questions.

## Table of Contents

How many chapters are listed in the textbook? \_\_\_\_\_\_

Write the titles for chapters:

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 11. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. \_\_\_*\_\_\_\_\_\_\_\_\_\_\_\_\_\_* 14. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 19. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 20. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

List the Chapter Preview for chapter 11.

11.1 *\_\_\_\_*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

11.2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

11.3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Pages xii -xiv**

What major topic is included on these pages? \_\_\_\_\_\_\_\_\_\_\_\_\_

**Features (pages xvi -xvii)**

List four possible Careers in Science

34 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 35 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

324 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 325 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# **Locate “Math Skills” on page xv**

On what page is the equation for calculating average speed? \_\_\_\_\_\_\_\_\_\_\_\_\_

What is the equation for calculating average speed shown on that page? \_\_\_\_\_\_

# **Key Concepts (***Go to the section of the given chapter in the text.***)**

Write the “Key Concepts” for the following:

1.2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8.3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

14.1 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

20.3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Section Assessment (*Within each Chapter.*)

List two items given in “Section \_\_ Assessment” at the end of each section of a chapter:

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Study Guide (*End of each Chapter.*)

List two items given in each section of the end of the chapter Study Guide:

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is given at the bottom right corner of each Study Guide: \_\_*Thinking Visually*\_\_\_\_

## Assessments

List the first four sections of the end of the chapter Assessments

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is located on the last section of every chapter? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# **Skills & Reference Handbook (***Beginning page 654***)**

Give the page number where you would find help for each of the following items:

Science Safety \_\_\_\_\_\_\_\_ Percents and Decimals \_\_\_\_\_\_\_\_

Scientific Notation \_\_\_\_\_\_\_\_ Significant Figures \_\_\_\_\_\_\_\_

# Appendices **(***Beginning page 676***)**

Give the name for each of the following Appendices (back of text)

### Appendix A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Appendix B \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Appendix D \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Appendix E \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Glossary

What two languages are represented in the textbook’s glossary?

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

On what page would you find the definition for the following words:

Boyle’s Law \_\_\_\_\_\_\_\_ index of refraction \_\_\_\_\_\_\_\_

Speed \_\_\_\_\_\_\_\_ wavelength \_\_\_\_\_\_\_\_

# **Index**

What page should you go to find the following terms or concepts in the textbook?

Angle of incidence \_\_\_\_\_\_\_\_ Bernoulli’s principle \_\_\_\_\_\_\_\_

Conservation of momentum \_\_\_\_\_\_\_\_ Electric charge \_\_\_\_\_\_\_\_

Force(s) net \_\_\_\_\_\_\_\_ Graph(s) nonlinear \_\_\_\_\_\_\_\_

Laws, scientific \_\_\_\_\_\_\_\_ Mass number \_\_\_\_\_\_\_\_

Sound Doppler Effect \_\_\_\_\_\_\_\_ Work output \_\_\_\_\_\_\_\_

What is located on the last printed page of the textbook? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

This should help you in using your textbook.

# Answer Key

# Go through your textbook (from page vi to end) to answer all of the questions.

## Table of Contents

How many chapters are listed in the textbook? \_\_\_21\_\_\_\_

Write the titles for chapters:

1. \_\_\_*Science Skills*\_\_\_\_\_\_\_\_\_\_\_\_\_ 11. \_\_\_\_*Motion*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. \_\_\_*Atomic Structure\_\_\_\_\_\_\_\_\_\_\_\_\_* 14. \_\_\_\_*Work, Power, and Machines*\_\_\_

7. \_\_\_*Chemical Reactions*\_\_\_\_\_\_ 19. \_\_\_\_*Optics*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10. \_\_\_*Nuclear Energy*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 20. \_\_\_\_*Electricity*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

List the Chapter Preview for chapter 11.

11.1 *\_\_\_\_Distance and Displacement*\_\_\_\_\_\_

11.2 \_\_\_\_*Speed and Velocity*\_\_\_\_\_\_\_\_\_\_\_

11.3 \_\_\_\_*Acceleration*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Pages xii -xiv**

What major topic is included on these pages? \_\_\_\_\_\_*Labs*\_\_\_\_\_\_\_

**Features (pages xvi -xvii)**

List four possible Careers in Science

34 \_\_\_\_*Toxicologist*\_\_\_\_\_\_\_\_\_\_\_\_\_ 35 \_\_\_\_*Pharmacist*\_\_\_\_\_

324 \_\_\_\_*Camera Operator*\_\_\_\_\_\_\_\_ 325 \_\_\_*Electrician*\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# **Locate “Math Skills” on page xv**

On what page is the equation for calculating average speed? \_\_\_\_\_\_\_*333*\_\_\_\_\_\_\_\_\_\_

What is the equation for calculating average speed shown on that page? \_\_\_*v = d/t*\_\_\_

# **Key Concepts (***Go to the section of the given chapter in the text.***)**

Write the “Key Concepts” for the following:

1.2 \_\_\_*What is the goal of a scientific method?\_\_\_\_\_*

*\_\_\_How does a scientific law differ from a scientific theory?*\_\_\_

*\_\_\_Why are scientific models useful?*\_\_\_

8.3 \_\_\_*What are some general properties of acids and bases??\_\_\_\_\_*

*\_\_\_What are the products of neutralization?\_\_\_\_\_\_\_\_*

*\_\_\_What are proton donors and proton acceptors?\_\_\_\_\_\_\_\_*

14.1 \_\_\_*When does a force do work?\_\_\_\_\_*

*\_\_\_How are work and power related?*\_\_\_

20.3 \_\_\_*What is included in a circuit diagram?\_\_\_\_*

\_\_\_*How do series and parallel circuits differ?\_\_\_\_*

\_\_\_*How do you calculate electric power and electric energy use?\_\_\_\_*

\_\_\_*What devices make electricity safe to use?\_\_\_\_\_*

## Section Assessment (*Within each Chapter.*)

List two items given in “Section \_\_ Assessment” at the end of each section of a chapter:

1. \_\_\_\_*Reviewing Concepts*\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_*Critical Thinking*\_\_\_\_\_\_\_\_\_\_

## Study Guide (*End of each Chapter.*)

List two items given in each section of the end of the chapter Study Guide:

1. \_\_\_\_*Key Concepts*\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_*Vocabulary*\_\_\_\_\_\_\_\_\_\_

What is given at the bottom right corner of each Study Guide: \_\_*Thinking Visually*\_\_\_\_

## Assessments

List the first four sections of the end of the chapter Assessments

1. \_\_\_\_*Reviewing Concepts*\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_*Understanding Concepts*\_\_\_\_\_

3. \_\_\_\_*Critical Thinking*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4. \_\_\_*Math Skills*\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is located on the last section of every chapter? \_\_\_\_*Standardized Test Prep*\_\_\_\_\_\_\_\_

# **Skills & Reference Handbook (***Beginning page 654***)**

Give the page number where you would find help for each of the following items:

Science Safety \_\_660\_\_ Percents and Decimals \_\_665\_\_\_\_

Scientific Notation \_\_667\_\_ Significant Figures \_\_668\_\_

# Appendices **(***Beginning page 676***)**

Give the name for each of the following Appendices (back of text)

### Appendix A \_\_\_*SI Units*\_\_\_\_\_\_\_ Appendix B \_*Using a Laboratory Balance*\_\_

Appendix D \_\_*Problem Bank*\_\_\_\_\_\_\_\_ Appendix E \_\_*Selected Answers*\_\_\_\_\_\_\_\_

## Glossary

What two languages are represented in the textbook’s glossary?

1. \_\_\_\_*English*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_*Spanish*\_\_\_\_\_\_\_\_\_\_\_

On what page would you find the definition for the following words:

Boyle’s Law \_\_\_*79*\_\_\_ index of refraction \_\_\_\_*575*\_\_\_\_

Speed \_\_\_\_*332*\_\_\_\_ wavelength \_\_\_\_*505*\_\_\_\_\_\_

# **Index**

What page should you go to to find the following terms or concepts in the textbook?

Angle of incidence \_\_\_\_*570*\_\_\_\_ Bernoulli’s principle \_\_\_\_*396-97, 398*\_\_\_

Conservation of momentum \_\_\_\_*376-377*\_\_\_ Electric charge \_\_\_\_*600-601*\_\_\_\_

Force(s) net \_\_\_\_*357*\_\_\_\_ Graph(s) nonlinear \_\_\_\_*348*\_\_\_\_

Laws, scientific \_\_\_*9*\_\_\_\_ Mass number \_\_\_*110*\_\_\_

Sound Doppler Effect \_\_\_516, 542\_\_\_\_\_ Work output \_\_\_420\_\_\_\_

What is located on the last printed page of the textbook? \_\_*Periodic Table of Elements*\_\_\_