

# Table of Contents

<b>Introduction</b> . . . . .	4	The Battle of Thermopylae: Persia vs. Greece (480 B.C.) . . . . .	32
<b>Meeting Standards</b> . . . . .	8	The Colors in the Sky . . . . .	33
<b>Practice Passage 1: High Honors</b> . . . . .	9	Traditional Music . . . . .	34
<b>Practice Passage 2: A Brief History of Trains</b> . . . . .	10	The Air Age Begins . . . . .	35
<b>Practice Passage 3: U.S. Special Operations Forces</b> . . . . .	11	How Does a Cell Phone Work? . . . . .	36
Interesting Creatures in the Deep Blue Sea. . . . .	12	The Adventures of Lord Stanley's Cup . . . . .	37
Old Wives' Tales . . . . .	13	All About Dogs. . . . .	38
Musical Instruments from Around the World. . . . .	14	Painting on the Wall. . . . .	39
Worms . . . . .	15	Water Woes . . . . .	40
All About Bats . . . . .	16	Yellowstone National Park. . . . .	41
Board Games. . . . .	17	What's Out There? . . . . .	42
How Do Scientists Make Discoveries? . . . . .	18	Your Hearing, Sight, and Touch. . . . .	43
Danger! Poison! . . . . .	19	All About Slang . . . . .	44
The King of Games . . . The Game of Kings . . . . .	20	Facts About Our Moon and the Stars . . . . .	45
How a Bill Becomes a Law . . . . .	21	Metrology. . . . .	46
The British Invasion of 1964 . . . . .	22	Musical Instruments . . . . .	47
Body Basics: Three Human Body Systems . . . . .	23	Working Like a Dog . . . . .	48
More Human Body Systems . . . . .	24	Elements, Compounds, and Minerals . . . . .	49
Fashion . . . . .	25	The Evolution of Automobiles . . . . .	50
Believe It or Not Geography Facts . . . . .	26	Modern Music . . . . .	51
Surprising Facts About Animals . . . . .	27	People in Canada and Afghanistan. . . . .	52
All About Cloning. . . . .	28	The Buzz on Bees . . . . .	53
Survival Stunts. . . . .	29	Fun Facts About Numbers . . . . .	54
Engineering Feats . . . . .	30	All About Comic Books . . . . .	55
Energy Keeps Us Moving . . . . .	31	In the Air: U.S. Military Aircraft. . . . .	56
		Amazing Migrations. . . . .	57
		Great Ideas That Happened by Accident . . . . .	58

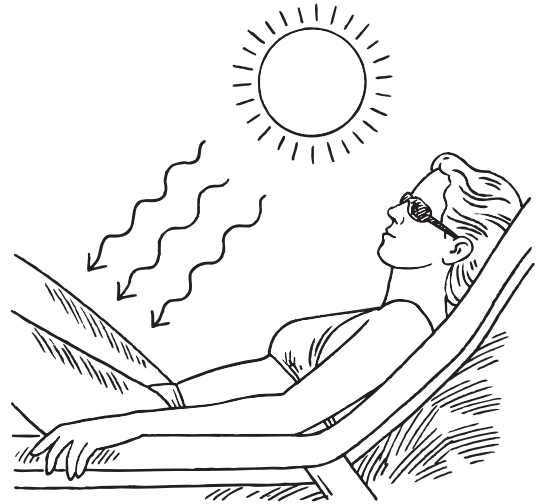
# Table of Contents *(cont.)*

Sitting Bull . . . . .	59	All About Trading Cards. . . . .	86
The <i>International Space Station</i> . . . . .	60	Gaining the Upper Hand in War . . . . .	87
What is the Ozone Layer? . . . . .	61	A Few Facts About Lefties . . . . .	88
Famous American Women of the Twentieth Century . . . . .	62	Famous African-American Women . . . . .	89
Lightning . . . . .	63	Fossils: Clues to Ancient Life. . . . .	90
Snowboarding . . . . .	64	Immigration: The Many Faces of America . . . . .	91
Playground Games . . . . .	65	Facts About the English Language . . . . .	92
A Day Aboard the <i>International Space Station</i> . . . . .	66	Famous Twentieth Century Scientists . . . . .	93
What Your Immune and Endocrine Systems Do . . . . .	67	The Smithsonian Institution. . . . .	94
Holidays Around the World . . . . .	68	Outer Space. . . . .	95
All About Eponyms . . . . .	69	People in Jamaica and Peru . . . . .	96
People in Egypt and Guatemala . . . . .	70	Milestones in Aviation . . . . .	97
Famous Women in History . . . . .	71	All About Apple Computer, Inc. . . . .	98
Shenandoah National Park . . . . .	72	Famous Artists and Their Schools of Art . . . . .	99
All About the Euro . . . . .	73	Famous Native Americans. . . . .	100
U.S. Aircraft Carriers . . . . .	74	Remembering September 11th: Tragedy and Response . . . . .	101
Classic American Toys. . . . .	75	The Pentagon . . . . .	102
Ships . . . . .	76	Mummies of Egypt . . . . .	103
The Universe . . . . .	77	Famous Past Scientists. . . . .	104
Making Money. . . . .	78	All About Castles. . . . .	105
All About the Udvar-Hazy Center . . . . .	79	The Age of the Dinosaurs . . . . .	106
Dangerous Animals . . . . .	80	Recent Dinosaur News . . . . .	107
What Impeachment Means . . . . .	81	Famous African-American Men. . . . .	108
Dancing . . . . .	82	Out-There Artwork! . . . . .	109
Amazing Geography Facts . . . . .	83	<b>Answer Sheets</b> . . . . .	110
Famous Female Scientists . . . . .	84	<b>Answer Key</b> . . . . .	111
Paper Money . . . . .	85		

# What is the Ozone Layer?

Our atmosphere is made up of different layers. One layer, between 6 and 30 miles above the Earth, is made up of ozone gas. This ozone layer protects us from the Sun's harshest rays called ultraviolet (UV rays). These rays can cause sunburn and skin cancer.

When old refrigerators, air conditioners, and similar items are thrown away, gases from them (called chlorofluorocarbons or CFCs) rise into the air. They destroy some of the ozone in this layer. Most countries no longer produce CFCs. But the gas can stay in the atmosphere for years and continue to destroy the ozone.



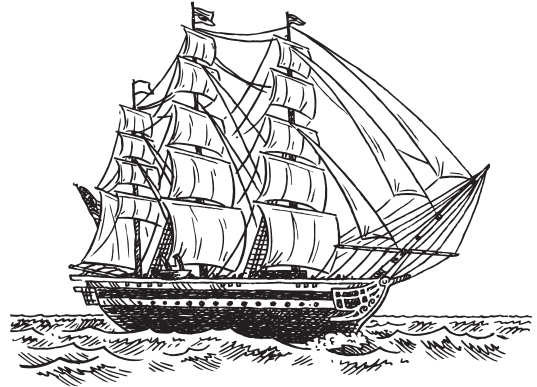
Each August, a hole in the ozone layer forms over Antarctica. It usually closes by December. Since it was discovered in the 1980s, it has doubled to about the size of North America. It sometimes extends over southern Chile and Argentina. On some days, the people in Punta Arenas, Chile (the world's southernmost city) may limit their sun exposure to no more than 20 minutes between noon and 3 p.m. On other days, they don't go out at all!

**Directions: Choose the correct answer.**

1. The hole in the ozone layer was discovered over
  - (a.) 20 years ago.
  - (b.) 50 years ago.
  - (c.) 75 years ago.
  - (d.) 100 years ago.
2. The sun's harshest rays are called
  - (a.) CFCs.
  - (b.) UV.
  - (c.) chlorofluorocarbons.
  - (d.) ozone.
3. Why do the people in Punta Arenas sometimes avoid the sun?
  - (a.) They don't want to get a suntan.
  - (b.) They will die within 24 hours if they stay out in the sun for 30 minutes.
  - (c.) They don't want to get skin cancer.
  - (d.) They are allergic to ozone.

# Ships

Ships are used for many activities, from fishing to vacation to exploration to war. But their most important job has always been carrying cargo. The Egyptians were building reed and wooden sailboats some 5,000 years ago. They also built wooden barges over 200 feet long that could carry close to 2,000,000 pounds of cargo.



By the 1500s, huge sailing ships called galleons were hauling cargo around the world. Spanish galleons carried gold, spices, and other riches back to Europe from South America. These ships had to be big and needed cannons to defend themselves from pirates. Later cargo ships did without cannons. Packet ships began regularly scheduled passenger service across the Atlantic in 1818. In the 1840s, the U.S. built the first clipper ships. With a slender hull and many sails, they were the fastest ships of the pre-steam era.

The world's biggest ship today is the supertanker *Jahre Viking*. It's 1,502 feet long. That's longer than the Empire State Building is tall. The *Jahre Viking* can carry 4.2 million barrels of oil. In January 2004, the *Queen Mary 2* set sail for the first time. It is the largest passenger ship ever. It is 23 stories high and 1,131 feet long. That's almost 150 feet longer than the height of the Eiffel Tower.

**Directions: Choose the correct answer.**

- Which is an example of cargo?
  - computers
  - military troops
  - tourists
  - national leaders
- The largest ship ever built is
  - an ancient Egyptians barge.
  - the *Jahre Viking*.
  - the *Queen Mary 2*.
  - a Spanish galleon.
- Clipper ships were first designed in
  - South America.
  - Egypt.
  - the U.S.A.
  - Spain.