MAPS CHARTS GRAPHS

United States Past and Present Level H Project Editor: Marty Geyen

Editor: Marty Green Editor: Leslie Baranowski

Project Design: Mike Whipkey, Artful Communications

Cover Illustration: Jerry Harston

Cover Design: Francyne Abate Sepich

Maps on pages 2-23, 28: Sanderson Associates

Maps on pages 30-43, 50-51, 62-63: *David Germon, Graphic Illustrator* Graphs and Charts on pages 52, 54-70: *David Germon, Graphic Illustrator*

Photo Research: Amy Van Hoose

Photographs: 2, 67, The Granger Collection, New York; 5, D & I McDonald/The Picture Cube; 11, Michael Bertan/TSW-Click Chicago; 12, Richard Kosowski/Stockphotos, Inc.; 19, Charles McNulty/TSW-Click Chicago; 27, Dallas & John Heaton/TSW-Click Chicago; 33, Frank J. Staub/The Picture Cube; 41, Reims Photo 6851/Stockphotos, Inc.; 49, Stephen Marks/Stockphotos, Inc.; 61, UPI/Bettmann Newsphoto; 71, Modern Curriculum Press; 74, Culver Pictures.

Maps on pages 24, 26, 46, and 48 from <u>Deluxe Road Atlas & Travel Guide</u> © Copyright 1989 by Rand McNally & Company, R.L. 89-5-193. Map on page 44 from <u>Newsweek</u>, June 27, 1988, National Oceanic and Atmospheric Admin.: The Dept. of Agriculture. Map on page 45 from <u>Newsweek</u>, June 9, 1986, Utah Geological and Mineral Survey.

Graph on page 53 from USA Today, August 2, 1988, © Copyright 1988, USA Today. Reprinted with permission.

Cartoon on page 72, "Nice timing." © Copyright 1988 by HERBLOCK in <u>The Washington Post</u>. Cartoon on page 73, Rogers, © Copyright 1988, <u>Pittsburgh Press</u>. Cartoon on page 74, Joseph Keppler. "Looking Backward," for <u>Puck</u>, January 11, 1893.

Modern Curriculum Press

An imprint of Pearson Learning 299 Jefferson Road, P.O. Box 480 Parsippany, NJ 07054–0480 http://www.pearsonlearning.com

Copyright © 1990 by Pearson Education, Inc., publishing as Modern Curriculum Press, an imprint of Pearson Learning Group, 299 Jefferson Road, Parsippany, NJ 07054. All rights reserved. No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the publisher. For information regarding permission(s), write to Rights and Permissions Department. This book is published simultaneously in Canada by Pearson Education Canada.

ISBN 0-8136-2139-9

Printed in the United States of America

17 18 19 20 21 11 10 09 08 07



MAPS CHARTS GRAPHS

United States Past and Present Level H

Dale I. Foreman, Ph.D.

Sally J. Allen
Writer and Social Studies Consultant

Modern Curriculum Press

CONTENTS

•			
Lesson 1	Finding Directions		2-3
Lesson 2	Using Map Scale		4-5
Lesson 3	Reading a Map Key		6-7
Lesson 4	Using a Letter-Number Grid		8
Lesson 5	Using Parallels and Meridians		9-11
Lesson 6	Finding Exact Locations on a Map		12-13
Lesson 7	Using an Atlas		14-15
Lesson 8	Reading Contour Maps		16-17
Lesson 9	Using Elevation Maps		18-19
Lesson 10	Comparing Map Projections		20-21
Lesson 11	Reading a Time Zone Map		22-23
Lesson 12	Using a Highway Map		24-25
Lesson 13	Using a City Map		26-27
Lesson 14	Reading an Historical Map		28-29
Lesson 15	Comparing Historical Maps		30-31
Lesson 16	Reading a Climate Map		32-33
Lesson 17	Reading a Weather Map		34-35
Lesson 18	Reading Special Purpose Maps		36-37
Lesson 19	Comparing Special Purpose Maps		38-39
Lesson 20	Interpreting an Historical Map		40-41
Lesson 21	Analyzing Map Data		42
Lesson 22	Finding the Best Location		43
Lesson 23	Analyzing Current Events Maps		44-45
Lesson 24	Finding the Best Route		46-47
Lesson 25	Planning a Trip		48-49
Lesson 26	Analyzing a Trend		50
Lesson 27	Solving a Land-Use Problem		51
Lesson 28	Reading a Circle Graph		52-53
Lesson 29	Comparing Circle Graphs		54
Lesson 30	Reading a Bar Graph		55
Lesson 31	Comparing Bar Graphs		56
Lesson 32	Reading a Double-Bar Graph		57
Lesson 33	Reading a Line Graph		58
Lesson 34	Reading a Double-Line Graph		59
Lesson 35	Interpreting Graphs		60-61
Lesson 36	Using a Map and a Graph Together		62-63
Lesson 37	Reading a Table		64-65
Lesson 38	Reading a Time Line		66-67
Lesson 39	Interpreting Time Lines		68-69
Lesson 40	Reading a Chart		70-71
Lesson 41	Reading a Political Cartoon		72-73
Lesson 42	Interpreting Historical Cartoons		74-75
Glossary	30		76
Answer Key			77-80
Atlas			81-92
Skills Index		Inside Back	(Cover

Finding Directions

Objective: to use a compass rose or direction arrow to find directions on a map

Maps give you many different kinds of information. One kind of information that nearly all maps show is direction. When you read a map, look for an arrow or other pointer to help you find directions.

The four most important directions are called the **cardinal directions**. Two of the cardinal directions are **north** and **south**. What are the other two?

1. _____The North Pole is the north

The North Pole is the northernmost point on Earth. No matter where in the world you are standing, north is toward the North Pole. Likewise, the South Pole is the southernmost point on Earth. South is always toward the South Pole.

WEST

Direction of rotation

South Pole
SOUTH

East is the direction that Earth turns. It is the direction of the sunrise. West is the direction opposite east, and is the direction of the sunset.

If you know one direction, you can figure out the others. When you face north, south is straight behind you. East is to your right. West is to your left.

To describe directions that are not exactly north, south, east, or west, people combine these words. For example, the direction halfway between north and east is called northeast. The direction halfway between south and west is called southwest. Northeast, southeast, northwest, and southwest are **intermediate directions**.

Add all four intermediate directions to this diagram.

2.



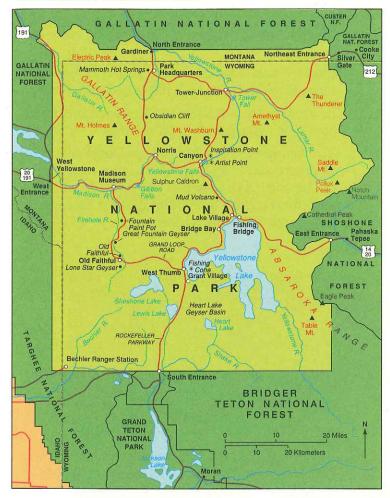
The drawing you have made is called a **compass** rose. Some maps have a compass rose to help you find all of these directions. Other maps have a pointer that shows only one direction, usually north. North is often at the top of the map—but not always! To be sure of directions, you should look for a north arrow or a compass rose.



Early navigators use placement of sun and stars to find directions.

Use the map of Yellowstone National Park to answer the following questions.

Yellowstone National Park



- 3. Find the north arrow on the map. Which edge of this map is the northern edge?
 - a. left
 - b. right
 - c. top
 - d. bottom
- 4. What state is on the northern boundary of Yellowstone National Park?
 - a. Idaho
 - b. Wyoming
 - c. Montana
 - d. Colorado

- 5. What national forests border Yellowstone on the west?
 - a. Shoshone and Teton National Forests
 - b. Gallatin and Targhee National Forests
 - c. Targhee and Teton National Forests
 - d. Gallatin and Shoshone National Forests
- 6. What direction do you travel to go from West Thumb to Old Faithful?
 - a. north
 - b. south
 - c. east
 - d. west
- 7. What river flows into Yellowstone Lake from the southeast?
 - a. Snake River
 - b. Bechler River
 - c. Yellowstone River
 - d. Madison River
- 8. Which one of these is located in the northwestern corner of the park?
 - a. Bechler
- c. Gallatin
- b. Silver Gate
- d. Pahaska Tepee
- 9. What mountain lies northeast of Inspiration Point?
 - a. Mt. Holmes
 - b. Amethyst Mt.
 - c. Saddle Mt.
 - d. Sulphur Mt.
- 10. If you come into the park's west entrance at West Yellowstone, what is the shortest way to West Thumb?
 - a. Go east to Madison Museum. Turn south to Old Faithful. Follow the Grand Loop Road east to West Thumb.
 - b. Go east to Madison Museum. Turn northeast to Norris. Take the Grand Loop Road through Canyon and Bridge Bay to West Thumb.
 - c. Go west on Highway 20 and 191. Turn north to Old Faithful. Follow the North Loop to West Thumb.
 - d. Go west on Highway 20 and 191.
 Follow the Grand Loop Road east to West Thumb.

Using Map Scale

Objective: to use the scale on a map to find and compare distances

Maps are scale drawings. Each inch on the map stands for a certain number of feet or miles on Earth's surface.

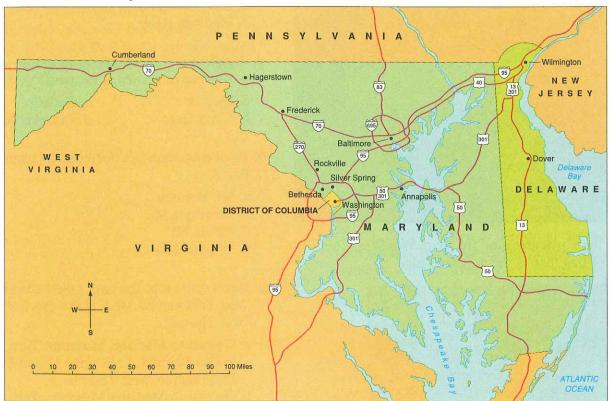
Most maps give you a scale bar to help you understand the distances shown on the map. To find out how far apart two places are, measure the distance between them with a ruler. Then use the scale bar to find how many miles that

distance stands for on Earth's surface. Some maps show scales in both miles and kilometers.

Every map has a different scale, depending upon how much area is shown on the map.

The first map in this lesson shows the states of Delaware and Maryland. The second map shows the District of Columbia. Look carefully at the scale markings on both maps and use them to answer the following questions.

Delaware and Maryland



- 1. How many miles does the scale on the map of Delaware and Maryland represent?
 - a. 10 b. 50 c. 20 d. 100

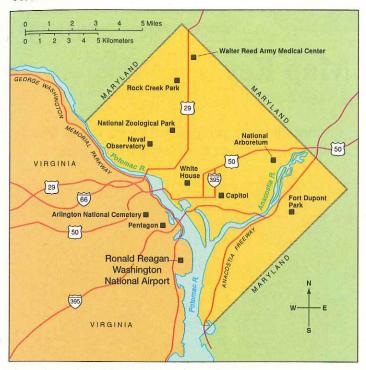
- 2. How far is it from Baltimore, Maryland, to Washington, D.C.?
 - a. about 30 mi

c. about 50 mi

b. about 20 mi

d. about 10 mi

The District of Columbia



- 3. How long is the western border of Delaware?
 - a. about 110 mi
 - b. about 87 mi
 - c. about 70 mi
 - d. about 123 mi
- 4. What is the distance between Hagerstown, Maryland, and Wilmington, Delaware, in a straight line?
 - a. about 85 mi
 - b. about 145 mi
 - c. about 35 mi
 - d. about 115 mi
- 5. Suppose you wanted to drive from Frederick to Wilmington by interstate highway. If you took highways 70, 695 and 95, how far would you have to drive?
 - a. about 105 mi
 - b. about 135 mi
 - c. about 65 mi
 - d. about 150 mi
- 6. How many kilometers does the scale on the map of the District of Columbia represent?
 - a. 5 b. 3 c. 15 d. 7

- 7. How many miles does the scale on the map of the District of Columbia represent?
 - a. 5

c. 15

b. 3

- d. 7
- 8. About how many kilometers are there in 3 miles?
 - a. 4

c. 6

b. 5

- d. 8
- 9. What is the distance from the Capitol to Fort Dupont Park?
 - a. 10 mi

c. 5 mi

b. 3 mi

- d. 15 mi
- 10. What is the distance from the White House to the Walter Reed Army Medical Center?
 - a. 1.5 mi

c. 15 mi

b. 7.5 mi

- d. 5.5 mi
- 11. On which map does an inch stand for more miles?
- 12. Which two cities are the farthest distance apart?
 - a. Washington and Baltimore
 - b. Frederick and Hagerstown
 - c. Hagerstown and Washington
 - d. Baltimore and Frederick



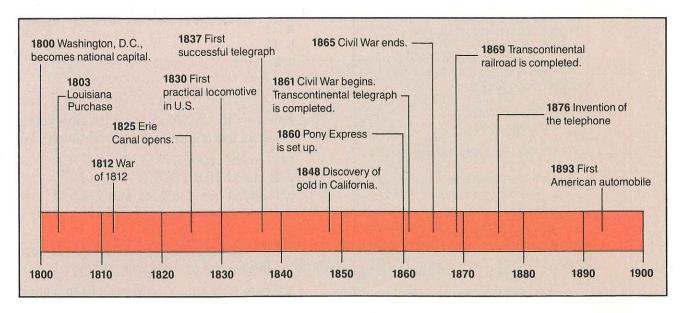
Visitors to Vietnam Memorial, Washington, D. C.

Interpreting a Time Line

Objectives: to arrange events in chronological order, compare time spans, and draw inferences based on information in a time line

This time line shows some major developments in transportation and communication in the

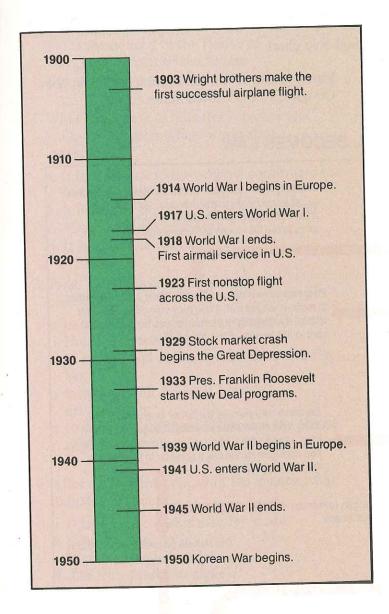
United States. Use it to answer questions 1-7.



- 1. How many years does this time line cover?
 - a. 1800
- b. 1900
- c. 200
- d. 100
- 2. When was gold discovered in California?
 - a. 1848
- b. 1854
- c. 1837
- d. 1840
- 3. How many years went by between the building of the first practical locomotive and the completion of a railroad across the continent?
 - a. 27
- b. 52
- c. 39
- d. 12
- 4. Between what two events was the longest span of time?
 - a. the first successful telegraph and the transcontinental telegraph
 - b. the first practical locomotive and the first automobile
 - c. the opening of the Erie Canal and the first successful telegraph
 - d. the operation of Pony Express and the invention of the telephone

- 5. The Erie Canal linked the port of New York with the Great Lakes. In what year was it opened?
 - a. 1820
- b. 1812
- c. 1825
- d. 1837
- 6. The Pony Express trip took eight or nine days from east to west coasts. What probably put the Pony Express out of business?
 - a. the invention of the first telegraph
 - b. the invention of the telephone
 - c. the transcontinental telegraph
 - d. the invention of the automobile
- 7. What form of communication would have been the fastest way to let people on the east coast learn about gold being discovered in California?
 - a. telephone
 - b. transcontinental railroad
 - c. Pony Express
 - d. telegraph

This time line shows some events of the first half of the twentieth century. Use it to answer questions 8–13.



- 8. In what year did the stock market crash occur?
 - a. 1914

c. 1929

b. 1941

d. 1933

9. In what year did the Wright brothers make the first successful airplane flight?

a. 1930

c. 1914

b. 1933

d. 1903

10. How many years went by between the end of World War I and the United States' entry into World War II?

a. 31b. 23

c. 14 d. 4

- 11. Which one of the following periods is shortest?
 - a. the period between the invention of the airplane and the first nonstop flight across the United States

b. the period between the stock market crash and President Roosevelt's New Deal programs

c. the period between the end of World War II and the beginning of the Korean War

d. the period between the Wright brothers' first airplane flight and the beginning of airmail service

- 12. Which one of the following periods is not shown on the time line?
 - a. the period between the invention of the airplane and the first nonstop flight across the United States

b. the period between the stock market crash and President Roosevelt's New Deal programs

c. the period between the end of World War II and the beginning of the Korean War

- d. the period between the Wright brothers' first airplane flight and the beginning of airmail service
- 13. Place the following events at the correct chronological point on the time line.
 - a. 1927 Lindbergh made the first solo flight across the Atlantic.

b. 1947 First supersonic flight

c. 1941 First American jet flight

d. 1911 First flight across the United States (in 68 hops)

Answer Key

Lesson 1

pages	2-3

	, 0	
1. east and west	3. c	7. c
2. NE, SE, SW,	4. c	8. c
NW (clockwise)	5. b	9. b
·	6.4	10 a

Lesson 2

	pages 4-	5
1. d	6. a	11. on the map
2. c	7. a	of Delaware
3. a	8. b	and
4. b	9. b	Maryland
5. d	10. d	12. c

Lesson 3

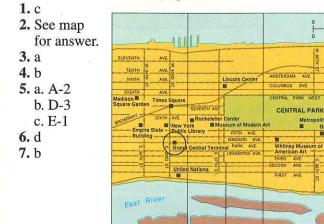
pages 6-7

	pages s ,	
1. d	6. d	11. d
2. c	7. b	12. b
3. c	8. c	13. d
4. d	9. a	
5. b	10. a	

14. Areas with high population density have more professional sports teams than do areas of low population density.

Lesson 4

page 8



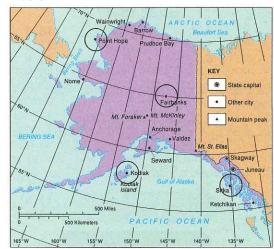
Lesson 5

	pages 9-11	
1. equator	13. d	
2. South Pole	14. b	
3.90° South	15. b	
4. Prime Meridian	16. a	
5. a	17. b	
6. b	18. b	
7. d	19. a. Denver	
8. c	b. Columbus	
9. c	c. Indianapolis	
10. a	20. a. 45° N, 123° W	
11. c	b. 45° N, 93° W	
12. b	c. 39° N, 120° W	
	d. 36° N, 79° W	
	150	

Lesson 6

pages 12-13

Alaska



1. c		13. d
2. b		14. a
3. d		15. b
4. d	8	16. a. Ketchikan
5. c	b. Nome	
6. a		c. Seward
7. b		17. a. 57° N, 135° W
8. c		b. 65° N, 148° W
9. c		c. 58° N, 152° W
10. c		d. 68° N, 167° W
11. b	18. See map for answers.	
12 h		remote se l'exemple i martine le l'entre l'églé l'est référé de l'été l'églé le l'entre le le l'entre l'été l'églé l'entre l'