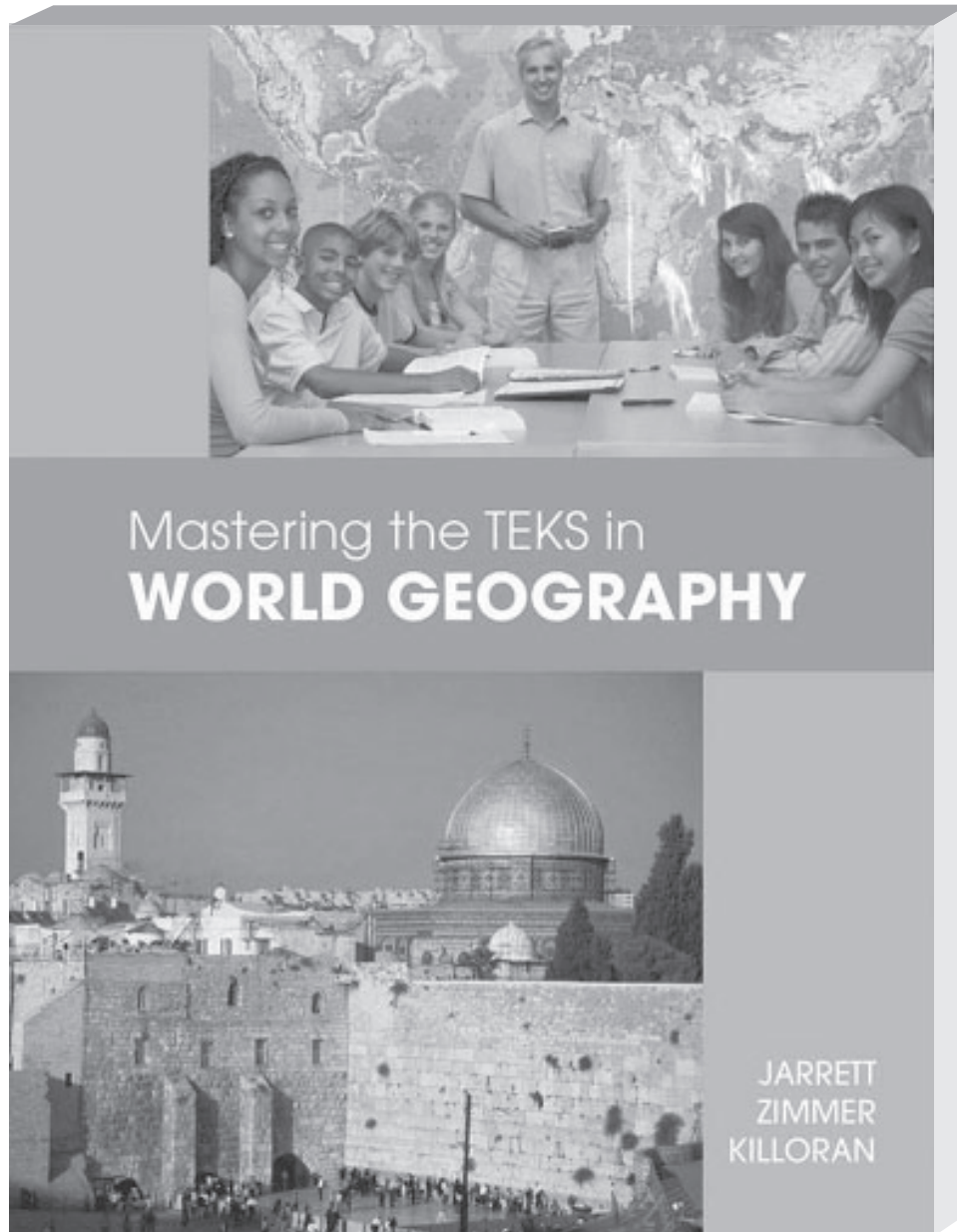


TEACHER'S GUIDE AND ANSWER KEY

\$2.95



A thorough mastery of the World Geography TEKS is essential for success on the new *End-of-Course Assessment*, to be taken by each high school student. ***Mastering the TEKS in World Geography*** is the best way to explore the World Geography TEKS, while also familiarizing your students with the statewide test. This book presents stimulating content and a myriad of learning activities to inspire your students to learn more about world geography.

KEY FEATURES OF THE BOOK

Mastering the TEKS in World Geography applies the latest educational research to help your students realize their full learning potential. Each major concept is presented in multiple formats to appeal to the different kinds of learners found in a heterogeneous classroom. Here are some of the key learning features of the book:

- ★ **ANSWERING DATA-BASED QUESTIONS.** Students learn how to analyze maps, tables, bar and line graphs, and photographic images similar to those that appear on the *World Geography End-of-Course Test*.
- ★ **ESSENTIAL QUESTIONS.** At the start of each content section, there are one or two *Essential Questions*. Each of these questions probes a central issue or concept explored in the chapter. These *Essential Questions* can provide the focus for your lesson plans.
- ★ **COMPREHENSIVE REVIEW OF THE TEKS.** *Mastering the TEKS in World Geography* thoroughly covers all of the new World Geography TEKS. Every TEKS is presented in this book.
- ★ **APPLYING WHAT YOU HAVE LEARNED AND ACTING AS AN AMATEUR GEOGRAPHER.** Students interact with what they have read through *Applying What You Have Learned* and *Acting as an Amateur Geographer* activities. These exercises reinforce knowledge and skills tested on the *World Geography End-of-Course Assessment*. They often ask students to *describe*, *explain*, or *analyze* information and encourage them to think about and apply what they have read. Many of these activities require students to use resources on the Internet or in their local or school library.
- ★ **LEARNING WITH GRAPHIC ORGANIZERS.** The completion of these graphic organizers helps students to gain a deeper understanding of what they have read by emphasizing concepts and conceptual relationships.
- ★ **STUDY CARDS.** *Study Cards* are found at the end of every content chapter. Students are encouraged to duplicate these cards and to make additional cards of their own.
- ★ **“PULLING IT ALL TOGETHER” REVIEWS.** Each unit concludes with a *Pulling It All Together* page. Here, students explore some of the most important information in the chapter. Students are asked to make generalizations or perform some other similar task based on what they have learned. Then students are asked to select one of the *Essential Questions* from the chapters in the unit and to answer that question.
- ★ **CONCEPT MAPS.** Each unit also concludes with a *Concept Map*, which visually represents the most important information and relationships found in the chapter.
- ★ **CHECKING YOUR UNDERSTANDING.** Every content chapter concludes with *Checking Your Understanding*. Here, students practice answering multiple-choice questions similar to those on *World Geography End-of-Course Assessment*. Every practice assessment item in the book is specifically identified by the TEKS it assesses.

- ★ **GUIDED PRACTICE.** The first question of each *Checking Your Understanding* provides “guided practice.” Students are shown how to answer the question using our unique metacognitive “E-R-A” approach.

OVERVIEW OF THE CHAPTERS

Mastering the TEKS in World Geography is organized into seven units. Together, these units provide a complete and comprehensive course covering *all* of Texas’ World Geography TEKS.

UNIT 1: INTRODUCTION

The introduction and Chapters 1, 2, and 3 lay a foundation for learning about world geography. Chapter 4, “Problem-Solving and Research Skills,” explores methods used by geographers in approaching problems and when conducting research. This introduction section describes the new *STAAR End-of-Course Assessment in World Geography* and identifies the types of questions on the test and their distribution by TEKS objective. Then students examine how each of the content chapters in the book is organized. Finally, students learn how to create and use *Study Cards*. Here is a brief summary of these chapters:

CHAPTER 1: HOW TO ANSWER MULTIPLE-CHOICE QUESTIONS

Students learn how to answer multiple-choice questions, including both sentence completion and data-based questions, using our metacognitive “E-R-A” approach: (1) **Examine** the question; (2) **Recall** what you know; and (3) **Apply** what you know. Students also explore a myriad of multiple-choice type questions (such as generalizations, cause-and-effect, and compare-and-contrast questions) and learn how best to approach each question type.

CHAPTER 2: HOW TO ANSWER DATA-BASED QUESTIONS

Students learn how to interpret various types of data, including tables, photographs, graphs, and diagrams. An entire section of the chapter is devoted to the two main kinds of sources used by geographers — primary and secondary — with examples of each. Students also learn about interpreting written sources and how to summarize. The chapter concludes with a look at using multiple sources of information.

CHAPTER 3: UNDERSTANDING MAPS / THE LANGUAGE OF GEOGRAPHY

This chapter teaches students how to read and interpret maps. Students look at the features of a map — its title, compass rose, scale, longitude and latitude, and symbols. Students also learn about different types of maps and what they are used for.

CHAPTER 4: PROBLEM-SOLVING AND RESEARCH SKILLS

This chapter shows how geographers approach problems and conduct research. In order to solve problems, geographers often use a logical, six-step process: identify the problem, gather information, list and consider options, consider the advantages and disadvantages of each option, choose and implement a solution, and develop criteria and judge the effectiveness of the solution. Finally, students explore how to plan their own research project and consider the various steps

involved in conducting research. Students look at how to narrow down a geographic question for research, how to find information about the topic, how to analyze the information, how to organize their notes, how to write or present their report, and finally, how to credit their sources in a bibliography.

UNIT 2: PHYSICAL GEOGRAPHY

This unit explores the study of Earth's surface features. These physical features provide the setting for the human geography that students will explore later in this book.

CHAPTER 5: A WORLD GAZETTEER: A LOOK AT THE SEVEN CONTINENTS

In this chapter, students learn about the primary physical features of each of Earth's seven continents. Here students learn about the most important mountain ranges, deserts, lakes and rivers of the world. In addition, students explore the concept of region, and how Earth's surface is divided into various distinct regions, which are identified by their common landforms, soil, climate, vegetation, and animal life.

CHAPTER 6: PROCESSES SHAPING PLANET EARTH

Students learn about Earth's lithosphere, hydrosphere, atmosphere, and biosphere. They learn that the lithosphere is made up of the Earth's crust and upper mantle. The hydrosphere includes the world's oceans, which cover a large part of the planet's surface. Students learn about the atmosphere, especially the impact of weather and climate on various regions of the world. Lastly, students explore the biosphere — the geographic regions that support different kinds of life, including forests, grasslands, deserts, and tundras.

CHAPTER 7: PEOPLE AND NATURE

In this chapter, students look at how people are connected to their environment. Students learn how humans interact with and modify their physical setting, and how people often face challenges in dealing with extremes of weather, natural disasters, and limited natural resources. Students also explore the problems posed for the future by pollution. Lastly, students explore the quest for sustainable development faced by both industrialized and developing nations.

UNIT 3: HUMAN GEOGRAPHY

In this unit, students learn about *human geography* — the study of people, their cultures, and their distribution across the face of the Earth. In the four chapters that comprise this unit, students look at how people create their own cultures and traditions.

CHAPTER 8: ASPECTS OF CULTURE

In this chapter, students learn about different aspects of human culture. They explore the major religions around the world, including animism, Buddhism, Christianity, Hinduism, Judaism, Islam, and Sikhism. Students compare lifestyles between urban and rural areas. The chapter concludes with an examination of ethnic and religious minorities and the different opportunities enjoyed by minorities in various cultures.

CHAPTER 9: CULTURAL REGIONS

Here students look at various types of regions (formal, functional, and perceptual). Then students briefly survey the various cultural regions found around the world with an emphasis on their language, religions and institutions. The chapter concludes with an in-depth research project in which groups of students investigate and report on one cultural region.

CHAPTER 10: DEMOGRAPHY

In this chapter, students learn about the factors that influence where people settle. They also learn how to interpret population density maps and population pyramids. The chapter concludes with a look at the world's current population and how it is growing at an accelerated rate, with more people alive today than at any other time in history.

CHAPTER 11: MIGRATION

In this chapter, students learn why people choose to migrate to different areas. Students examine the political, economic, social and environmental push-and-pull factors that cause people to migrate from one place to another. Students look at several case studies to illustrate each factor. Lastly, students examine how physical geography affects the flow of migration.

UNIT 4: CHANGE

In this unit, students look at the factors that cause *change* in geography. These factors include new ideas, new products, new conflicts, and changes in political, economic and military power.

CHAPTER 12: CULTURAL DIFFUSION AND CONVERGENCE

In this chapter, students look at how the spatial diffusion of ideas, products, and cultural traits can lead to change, including cultural divergence and convergence. Diffusion refers to how something diffuses or spreads. Geographers and historians are especially concerned with the patterns that such diffusion takes. In all instances, students look at various case studies as examples. The chapter concludes with a look at examples of cultural divergence and convergence taking place around the world.

CHAPTER 13: HISTORICAL CHANGE

Here, students examine how the physical and human geography of the world has changed over time and the effects of those changes. Students explore how human conflict, technological innovation, and other factors bring about such changes. Each factor is illustrated by at least one case study.

UNIT 5: POLITICAL GEOGRAPHY

In this unit, students learn about different types of governments and their impact on geography. They also examine how political power is distributed.

CHAPTER 14: TYPES OF GOVERNMENT

In this chapter, students look at different forms of government, including a monarchy, republic, democracy, dictatorship, totalitarian regime, and theocracy. Student then read an imaginary dialogue between Thomas Jefferson, Joseph Stalin, and King Louis XIV of France concerning which form of government is best.

CHAPTER 15: NATIONS: BORDERS AND POWER

In this chapter, students look at those factors that determine where boundaries between countries are established and how different countries relate to one another. Students learn about political regions. To see how borders are determined, they examine the borders of the United States, Mexico, Poland, France and Israel at different points in time. Students then learn about international relations, including the world's major powers and several international associations that have developed in the last half century.

CHAPTER 16: POLITICAL PROCESSES AND CITIZENSHIP

In this chapter, students explore how government decisions are made. They look at how citizens participate in government and how government policies are shaped by cultural beliefs, such as nationalism and patriotism. Students explore how different points of view affect policies and decision-making at the domestic and international level. Finally, students look at three international “hot spots”: Russia and Chechnya, Israel and Palestine, and Iran’s controversial quest for nuclear materials.

UNIT 6: THE GLOBALIZATION OF ECONOMICS

In this unit, the focus is on the “globalization” of economics. Students learn about economics and how, in our modern world, national economies are interacting with greater frequency and effect, forging a single “global” economy.

CHAPTER 17: ECONOMIC SYSTEMS

In this chapter, students learn what economics is, explore the problem of scarcity, and learn the three fundamental economic questions that every society must deal with. Students learn how societies have different economic systems, such as traditional, free enterprise, socialist, and communist. Each of these differing economic systems meets its people’s economic needs in different ways. Students also learn how specific countries can be classified based on the type of economy they have.

CHAPTER 18: ECONOMIC DEVELOPMENT

In this chapter, students learn how various indicators are used to measure how developed a nation’s economy is. Students learn about the *Human Development Index*, which classifies the level of development of a country by examining specific indicators. These indicators include life expectancy, birth and death rates, infant mortality rates, gross domestic product, gross domestic product per capita, and literacy rates. Finally, students examine how economists have classified different economic activities into four groups: primary, secondary, tertiary, and quaternary.

CHAPTER 19: THE CHALLENGES OF GLOBALIZATION

In this chapter, students look at the factors that influence where economic activities are located. Students examine the role of productive resources and the location of those productive resources. Because geography influences the location of economic activities, changes in physical or human geography often lead to changes in the location of these activities. Students next explore the effects of the uneven distribution of resources and how this phenomena leads to the rise of trade. Students then read a short history of global trading patterns, up to our present day. The chapter concludes with a look at the advantages and disadvantages of globalization.

UNIT 7: A PRACTICE ASSESSMENT

CHAPTER 20: A PRACTICE TEST IN WORLD GEOGRAPHY

The final part of the book provides a complete practice test, mirroring the type of questions and level of difficulty found on the *World Geography End-of-Course Assessment*. Each question on this test is identified by the TEKS it assesses. This final test acts as a diagnostic tool for you to find out what your students have learned and pinpoint their possible weaknesses for further review.

ORGANIZATION OF THE CONTENT CHAPTERS

Each content chapter in *Mastering the TEKS in World Geography* follows a similar pattern of organization to maximize student comprehension and to reinforce learning:

- ★ **List of TEKS.** Each content chapter begins with a list of the TEKS that are covered in the chapter. Students are thus able to identify clearly what each specific TEKS requires.
- ★ **Essential Questions.** At the start of each content section, students will find one or two *Essential Questions*. Each *Essential Question* probes a concept, issue or question that provides the main focus of the chapter. *Essential Questions* set the stage for further questioning and foster the development of critical thinking skills and higher-order reasoning. These questions can be used as focus questions for your lesson plans.
- ★ **Important Ideas.** This advance organizer introduces students to the most important ideas in the chapter at a high level of generality.
- ★ **Geographic Terminology.** This word wall identifies specialized content area vocabulary used in the chapter.
- ★ **Content Sections.** Each content chapter is divided into several smaller sections. Clear and insightful explanations help students to master and recall key ideas and facts. The text is accompanied by a plethora of maps, diagrams, and illustrations to help students visualize what they are learning.
- ★ **Applying What You Have Learned.** Throughout each section, *Applying What You Have Learned* activities encourage students to interact with what they have read. These exercises can be used in class in a number of different ways — for group work, individual assignments, class discussions, or short “Do Now” or “Quick-Writes” for brief in-class writing assignments.

- ★ ***Acting as an Amateur Geographer.*** Students learn better when they are actively involved in the learning process. *Acting as an Amateur Geographer* activities provide a variety of projects in which students use the Internet and other outside resources to learn beyond the classroom. These *Acting as an Amateur Geographer* activities provide students with the opportunity to conduct a wide range of “hands-on” activities, investigating and researching different topics.
- ★ ***Study Cards.*** *Study Cards* provide students with a tool to help them learn and recall specialized terminology. At the end of every chapter, *Study Cards* summarize the most important content information discussed in that chapter. Students are encouraged to duplicate these cards and to make additional cards of their own to reinforce the most important concepts, facts, and relationships.
- ★ ***Pulling It All Together.*** Every unit concludes with a one-page review that asks students to “pull together” what they have learned in the unit. Here students are asked to list generalizations or questions and to return answer some of the *Essential Questions* that appeared in that unit.
- ★ ***Concept Maps.*** Each unit also concludes with a *Concept Map*. These *Concept Maps* represent relationships between concepts, events and terms in the same way a road map represents the locations of highways and towns.
- ★ ***Guided Practice.*** The first multiple-choice question at the end of each chapter presents a distinctive style of question, ranging from data-based questions to compare-and-contrast or generalization-type questions. The answer to this first multiple-choice question in each *Checking Your Understanding* section is then fully explained.

This book thus provides a complete program for *assimilating, applying, reinforcing, and assessing* all of the TEKS appearing on the *World Geography End-of-Course Assessment*.

- ★ ***Students Preview What They Will Learn.*** *Unit Openers, Geographic Terminology, Essential Questions, and Important Ideas* allow students to preview important ideas and terms they will learn in that chapter.
- ★ ***Students Comprehend and Assimilate What They Will Learn.*** Content sections, illustrations, diagrams, and maps help students to comprehend and assimilate the most important concepts and facts identified by the TEKS.
- ★ ***Students Reinforce and Apply What They Have Learned.*** *Applying What You Have Learned, Amateur Geographer, Learning with Graphic Organizers, Study Cards, Pulling It All Together, and Concept Maps* help students apply and reinforce what they have learned.
- ★ ***Students Practice What They Have Learned.*** Practice questions in the *Checking Your Understanding* sections and the Final Practice Test further reinforce learning and give students practice with the format of test items similar to those on the *World Geography End-of-Course Assessment*.

APPROACHES TO USING THIS BOOK

There are just as many ways to using *Mastering the TEKS in World Geography* as there are ways to approaching a lesson. But in general, there are three main approaches to using this book:

- (1) Use this text as your primary resource, which you supplement with excerpts from other textbooks, the Internet, trade books, and audio-visual materials.
- (2) Use the *Essential Questions* to discuss the main themes of World Geography.
- (3) Use this text as a supplement to another resource.

USING THE BOOK AS A PRIMARY RESOURCE

One approach is to use *Mastering the TEKS in World Geography* as your primary classroom resource, which you can supplement with excerpts and images from trade books, the Internet, other textbooks and other outside sources.

For this approach, you should begin with Chapter 1 and move through each unit of the book in sequence. Other materials can be used for illustrative purposes or to provide primary sources for the group-work activities and research projects recommended in the *Applying What You Have Learned* activities of this book. Students can read the appropriate sections in the book to highlight the main concepts and terms related to each topic. This should be followed by guided and independent practice in answering questions at the end of each chapter in the *Checking Your Understanding* sections.

Every lesson can be introduced by one or more of the *Essential Questions* found at the beginning of each content chapter. The lesson can be developed around these *Essential Questions* and these *Applying What You Have Learned* activities in the chapter. Additional lesson ideas are provided on pages 12 to 18 of this *Teacher's Guide*. Finally, a calendar of lessons for using this book as your main resource can be found on pages 15 to 21 of this *Teacher's Guide*.

USING THE ESSENTIAL QUESTIONS TO DISCUSS THE MAIN THEMES OF WORLD GEOGRAPHY

At the start of every content section, students will find one or two *Essential Questions*. You can also design and use additional *Essential Questions* of your own. These questions are excellent tools for focusing a classroom lesson on a meaningful goal. *Essential Questions* can be used to begin a topic of study and can be formulated to highlight concepts that you want your students to understand and apply. *Essential Questions* should center around major concepts, problems, interests or themes in world geography. High-quality *Essential Questions* are often open-ended, non-judgmental, meaningful, motivational, and invite further exploration. They encourage collaboration among students and teachers.

Essential Questions also provide a clear statement of expectations — identifying what students should know in the TEKS and be able to do. They should require your students to use higher-order thinking, problem-solving and decision-making skills. Lastly, they should motivate your students to organize their knowledge to reveal important ideas.

USING THIS BOOK AS ANOTHER RESOURCE

This book can also be used with other textbooks, whether those are arranged conceptually or regionally. Start your course with Chapters 1 to 4 of this book. Starting your year with these skills and making them a center piece for your course helps ensure student mastery of concepts and skills found on the *World Geography End-of-Course Assessment*. Have students practice these skills at the beginning of the year so that you can reinforce them, and make these skills a part of their work throughout the school year. Emphasize to your students that the skills covered in these first few chapters are often tested on the *World Geography End-of-Course Assessment*.

A CONCEPTUAL APPROACH

If you are using another resource that takes a conceptual approach, after you complete each unit you can reinforce student understanding by having students review the corresponding chapter or pages in *Mastering the TEKS in World Geography*. Here, complex facts and ideas are presented simply and concisely, helping students to focus on the most important information.

Applying What You Have Learned, Acting as an Amateur Geographer, Study Cards, Learning with Graphic Organizers, Pulling It All Together, Concept Maps and practice test questions will further enhance and reinforce student learning of that unit.

A REGIONAL APPROACH

If you are using a regional approach to teaching World Geography, you should match each region with one or more concepts from *Mastering the TEKS in World Geography*. For example, you may begin your study of world geography with Unit 2 of *Mastering the TEKS in World Geography*, on physical geography. Then you may turn to your other resources to teach your first regional unit — such as North America. As you explore North America, you should emphasize physical geography concepts from this book that your students are already familiar with. For example, what forces created the Rocky Mountains? Alternatively, you might teach a region, like Latin America, and then choose a chapter in this book, like “Aspects of Culture.” Have students identify different aspects of Latin American culture, such as their cultural traits, language, religion, and institutions.

Here is just one suggested plan for correlating a regional approach to world geography with this book. There are, of course, numerous other approaches that are equally valid:

Region	Unit in <i>Mastering the TEKS in World Geography</i>
North America	Physical Geography
Latin America	Human Geography
Europe	Change
Africa	Political Geography
Asia	Globalization of Economics

A COMBINED APPROACH

Another approach is to teach regions in world geography for five months, and then change to a conceptual approach in the remaining months preceding the End-of-Course Assessment. In this way, students enjoy the richness of a regional approach, but are also sure to cover every TEKS and to see how these concepts can apply to multiple regions.

CALENDAR OF LESSONS

The following calendar of lessons can be used if you use this book as your primary resource during the school year. Chapters range in length from 13 to 20 pages, including practice test questions. This *Calendar of Lessons* is meant only as a general guide for teachers. Each chapter should be supplemented by outside activities using the Internet and school library, based on the *Applying What You Have Learned* and *Acting as an Amateur Geographer* activities in the chapter.

AUGUST

Week	Lessons
1	Introduction and Chapter 1: How to Answer Multiple-Choice Questions
2	Chapter 2: How to Answer Data-Based Questions

SEPTEMBER

Week	Lessons
3	Chapters 2 & 3: How to Answer Data-Based Questions <i>and</i> Understanding Maps
4	Chapter 3: Understanding Maps: The Language of Geography
5	Chapter 4: Problem-Solving and Research Skills
6	Chapters 4 & 5: Problem-Solving <i>and</i> Research Skills and A World Gazetteer

OCTOBER

Week	Lessons
7	Chapter 5: A World Gazetteer: A Look at the Seven Continents
8	Chapter 6: Processes Shaping Planet Earth
9	Chapters 6 & 7: Processes Shaping Planet Earth <i>and</i> People and Nature
10	Chapter 7: People and Nature

NOVEMBER

Week	Lessons
11	Chapter 8: Aspects of Culture
12	Chapters 8 & 9: Aspects of Culture <i>and</i> Cultural Regions
13	Chapter 9: Cultural Regions
14	Thanksgiving Holiday

DECEMBER

Week	Lessons
15	Chapter 10: Demography
16	Chapter 10: Demography
17-18	Winter Recess

JANUARY

Week	Lessons
19	Chapter 11: Migration
20	Chapters 11 & 12: Migration <i>and</i> Cultural Diffusion and Convergence
21	Chapter 12: Cultural Diffusion and Convergence
22	Chapter 13: Historical Change

FEBRUARY

Week	Lessons
23	Chapter 13: Historical Change
24	Chapter 14: Types of Government
25	Winter Break: Martin Luther King Holiday
26	Chapter 14: Types of Government

MARCH

Week	Lessons
27	Chapter 15: Nations: Borders and Power
28	Chapters 15 & 16: Historical Change <i>and</i> Political Process and Citizenship
29	Chapter 16: Political Process and Citizenship
30-31	Spring Recess

APRIL

Week	Lessons
32	Chapter 17: Economic Systems
33	Chapters 17 & 18: Economic Systems <i>and</i> Economic Development
34	Spring Recess

MAY

Week	Lessons
35	Chapter 18: Economic Development
36	Chapter 19: The Challenges of Globalization
37	Chapter 20: Practice World Geography Test
38	Additional Practice and Review

SPECIFIC INSTRUCTIONAL STRATEGIES

Whichever way you use this book, there are several specific instructional strategies you may wish to adopt:

WORD WALLS (“GEOGRAPHIC TERMINOLOGY”)

Students should be able to recognize the specialized vocabulary of geography. Imagine playing a sport without being aware of all of the rules, or playing a musical instrument without knowing how to read music. This is how many students feel when they sit down to read a book that is written using specialized content-area vocabulary they have never encountered or practiced.

Word walls are found at the opening of each content chapter, identifying the specialized vocabulary of geography. As students complete the chapter, they will have seen the most important terms and concepts associated with geography. They will also be exposed to the definitions (or identifications) and will have developed a contextual understanding of these terms and concepts.

The word wall lends itself to various instructional activities. For example, you can have your students write brief definitions for five or six terms and concepts each night in their own words for homework. You might prefer using some of the terms and concepts listed in the word wall as a “warm up” activity at the start of your lesson. Or, these terms can be used as a summative evaluation of the content material in the chapter. You can go around the classroom asking students to raise their hands to identify a term, name or concept and its context as it appears in the chapter.

CREATE OR FILL IN OUTLINES

Have your students first take a brief “tour” of the chapter. Point out any special features that are in the chapter, such as the *Essential Questions* or *Important Ideas*. Then have your students look through the chapter again in class. This time, ask your students to create an outline of the chapter. Tell your students to pay particular attention to the headings and subheadings in the chapter. This technique is especially useful if you are using *Mastering the TEKS in World Geography* as your primary resource.

Alternatively, give your students an outline of the chapter with the headings and subheadings and space for them to add more detailed information. Then have your students read the chapter and complete the outline. Emphasize that they are limited to *one or two sentences* under each subheading and should not copy word for word from the book. This will limit what they can write so your students will not simply copy the text.

MAJOR IDEAS AND CHECKING YOUR UNDERSTANDING

For a model review lesson, have students look over the *Important Ideas* at the start of the chapter. Next, have students who feel unsure about a particular topic in the chapter read the appropriate pages dealing with that topic. Conclude the lesson by having students complete the related *Checking Your Understanding* questions for homework. The following day, have your students should discuss the correct answers to these questions.

CONCEPT MAPS

Have students make large posters based on the *Concept Maps* at the end of each chapter. Use these posters to decorate your classroom walls and bulletin boards. You can also have your students expand on and fill out particular sections of each *Concept Map* by adding further details.

STUDY GROUPS

Have students form small study groups. Each group should discuss one *Essential Question* found in the chapter (or unit) and present their answer to the class in an oral presentation. Student groups can also debate the *Essential Question*. Alternatively, have small groups work on the chapter tests as a group activity.

STUDY CARDS

The introduction to the book gives students ideas for how they can make and use their own *Study Cards*. You can also have students examine the information found on each *Study Card* and quiz one another in pairs or small groups about this information. For example, can a “study buddy” identify a term or concept from an illustration that a student has made on the back of one of the cards? Students can also use the *Study Cards* to create a “Jeopardy” style game before each unit test. You might also have students write out the information on the *Study Cards* in a larger format.

Some teachers encourage their students to bind these *Study Cards* together into a “mini-book” form. They can refer back to this mini-book of important terms and concepts as they progress through the book. Also, be sure to have students create and illustrate additional *Study Cards* on their own. You might wish to start each lesson by having a few students put their own created *Study Card* on the chalkboard before each lesson.

ANSWERING THE PRACTICE TEST QUESTIONS

Another recommended approach is to have students focus on answering the practice test questions. This is a simple and direct means to find out exactly what students know, and is especially useful if you are using this book as a supplement. This will allow you to pinpoint any problems your students may have with a particular topic.

- ★ Assign a chapter for homework. Have your students read through the content sections and complete the *Checking Your Understanding* at the end of the chapter.
- ★ When your students come to class, briefly review the main points of the chapter. Discuss the *Study Cards* (or *Concept Map* if you are at the end of the unit) as a particularly helpful form of review.
- ★ Have students complete the *Checking Your Understanding* at the end of the chapter in class. To conclude your classroom session, review the answers to each question.

ADDITIONAL LESSON IDEAS

There are many ways to approach teaching a lesson. What follows are several additional suggestions for how you might approach teaching the chapters in this book. Each lesson is presented in the form of a focus question and a possible way for developing the lesson. In planning your lessons, we recommend you begin with the focus question. Then decide on the best lesson format (lecture, class discussion, debate, student reports, etc.) for exploring and resolving the focus question in order to develop the lesson. Keep in mind that any of the following lesson ideas may extend over more than one class period. You might also use the teaching ideas below for different chapters.

CHAPTER 1: HOW TO ANSWER MULTIPLE-CHOICE QUESTIONS

Focus Question: *What is the best way to approach answering multiple-choice questions?*

Lesson Development: Have students review the material in the chapter about the various kinds of questions, such as recall, generalization, and cause-and-effect. Then have students make up their own questions on world geography. Finally have them apply the “E-R-A” approach discussed in the chapter, and see whether, by using this approach they arrive at the correct answer.

Focus Question: *How good are you at identifying the various types of multiple-choice questions?*

Lesson Development: You can make up a set of ten or fifteen multiple-choice questions for the class. Create a number list of these questions on the chalkboard and have students identify what type of question is being asked. Here the emphasis is on identifying question types and not finding the answer. Emphasize that once students know the kind of question being asked, they can then apply their knowledge on attacking that particular type question.

CHAPTER 2: HOW TO ANSWER DATA-BASED QUESTIONS

Focus Question: *What is the best way to approach answering a data-based question?*

Lesson Development: Have students review the material in the chapter for answering the various types of data found in the chapter. Then have students select one, two or three of the questions found in the chapter and write out how they would apply the “E-R-A” approach to answering those particular questions.

Focus Question: *How good are you at creating data-based questions?*

Lesson Development: Have students locate two pieces of data explored in this chapter. For each piece of data have them create two questions for that data. The first question should be a simple comprehension question, while the second question should ask some high-thinking level question, such as drawing a conclusion or making a generalization based on that data.

CHAPTER 3: UNDERSTANDING MAPS

Focus Question: *How good a cartographer are you?*

Lesson Development: Have students make a map of the neighborhood surrounding their school. Have them create a title, legend, compass rose, and scale for their map. Then have students create two multiple-choice questions based on the map they have created.

Focus Question: *How many different maps can you find?*

Lesson Development: Have students collect a variety of different map types, such as physical, political, historical, thematic, etc. Have them bring in different ones and state the type of map it is and why they believe that map is of that type.

Focus Question: *How do different types of maps compare with each other?*

Lesson Development: Have students compare and contrast two maps of different types showing the same area. For example, they could compare a physical feature map with a political map of the area. Have students list some of the differences between the maps. Finally, have students see if they can formulate two different generalizations based on the two maps they are comparing.

CHAPTER 4: PROBLEM-SOLVING AND RESEARCH SKILLS

Focus Question: *How would you go about solving a current problem in world geography?*

Lesson Development: Have students generate a list of current problems in the world today. After one problem has been chosen by the class, have each student develop a problem-solving approach to that problem. They should gather information about the problem, consider some of the options, weigh the advantages and disadvantages of each option, and try a solution. The class should list several of these problem-solving solutions and discuss how well they think each would work. Finally, the class should vote on the one solution they think would work best.

Focus Question: *What issue in world geography would you like to research?*

Lesson Development: Have students select a topic in world geography that they are interested in researching. Have them submit a well-defined geographic question for teacher approval before they begin their research project. After the question has been approved, the student can then set about finding information, creating a set of note cards, and submitting an outline of their research paper. Again, after receiving the teacher's approval they should then write their report and submit. Be sure that students have noted their sources of information in a bibliography.

CHAPTER 5: A WORLD GAZETTEER

Focus Question: *What physical features would you find in a tour of the world's continents?*

Lesson Development: Students should invent fictitious scenarios in which they take a trip around the world, visiting each of the seven continents. For their imaginary trip, students should identify and describe two important physical features from each of the seven continents. Their description should touch upon the importance of this feature to the people of that continent.

Focus Question: *What components make an area a physical region?*

Lesson Development: Have students create a list of eight to ten different physical regions. Next divide the class into an equal number of small groups of three or more students. Then have each group conduct an investigation of one of the physical regions. Students should indicate why the physical region they have selected is considered a physical region. Have them describe some of that physical region's common landforms, soils, climate, vegetation and animal life.

CHAPTER 6: PROCESSES SHAPING PLANET EARTH

Focus Question: *What effect does plate tectonic movement have on the Earth's land features?*

Lesson Development: Have students do some research on past earthquakes, tsunamis or volcanoes that have affected an area of the world over the last 25 years. They should create an information sheet. This sheet should focus on the damage caused by the disruption, the loss of human life, and the general changes that took place in the area where the event took place.

Focus Question: *How has your community been affected by weathering, erosion and deposition?*

Lesson Development: Have students review pages 89 and 90 concerning the information about weathering, erosion and deposition. Then have students create a three-column chart. The first column should contain the name of the processes, the second column should have a brief definition of the process, and the third column should have an example of that process from somewhere in their community.

Focus Question: *How are different geographic regions affected by their biosphere?*

Lesson Development: Have students divide into several groups. Each group should be assigned to investigate one of the biomes described on pages 99 to 100. The group should be responsible for finding an area in the world that is identified by that particular biome. The group should look at various examples of how that particular area's plants and animals biome.

Focus Question: *How do ocean currents affect the climate of an area?*

Lesson Development: Have students create a sketch of the Gulf Stream current described on page 95 on a map. Have them look up in the library or Internet the path of the Gulf Stream. Then let them select one area and fully describe the impact of the Gulf Stream on that particular area.

CHAPTER 7: PEOPLE AND NATURE

Focus Question: *How do governments deal with natural disasters?*

Lesson Development: Have students divide into several groups. Each group should select a recent natural disaster, such as Hurricane Katrina, the tsunami that affected Thailand and Indonesia, or the earthquake that struck Haiti. Students should research the disaster in their school or local library or on the Internet. Then students should improvise a skit showing how government officials dealt with warning people beforehand and with the aftermath of the disaster.

CHAPTER 8: ASPECTS OF CULTURE

Focus Question: *What are the components of culture?*

Lesson Development: Using visual materials from the Internet, magazines or other resources, have students in small groups create a collage featuring the six components of culture. Then have each group share their collage with another group. Ask the groups to identify the components of culture represented in the collage and tell which cultural group the component represents. To conclude the activity, ask students to answer the following question in a short essay “How is each of us a product of our culture?”

CHAPTER 9: CULTURAL REGIONS

Focus Question: *What makes cultural regions distinctive?*

Lesson Development: After completing the activity on pp. 154-155, *Acting as an Amateur Geographer*, have students select two regions and a country within each region. Then ask students to write a dialogue between two students who represent each of the countries and regions. The dialogue should describe the countries and regions both geographically and culturally. After writing the dialogue, ask students to point out how the countries/regions are similar and different. To extend the activity, ask students to hypothesize on which of the following issues would be the greatest concern to the people living in the country/region: energy, education, environment, poverty, literacy, health care, population, disease.

CHAPTER 10: DEMOGRAPHY

Focus Question: *What factors influence population growth?*

Lesson Development: Have students choose one of the fastest growing countries in the world: Qatar, China, Botswana, Azerbaijan, Republic of Congo, Angola, East Timor, Iraq, Liberia, Afghanistan, Uzbekistan, or Turkmenistan. Then ask students to research how transportation and access to resources have influenced this country’s population growth. Have them explain their findings using technology, such as a PowerPoint presentation.

Focus Question: *Is the world’s population growing too fast?*

Lesson Development: Ask students to look at current US population trends. Have them choose an area of the US that they predict will have a demographic shift and explain why. Have them use current census numbers, physical features, and urbanization to explain their choice. Ask students to support their answers with this data. Then have students create a population pyramid to explain the population of China and predict future growth.

CHAPTER 11: MIGRATION

Focus Question: *Why do people migrate?*

Lesson Development:

- ★ **Case Study 1:** Have students describe the economic conditions in East Germany that led to migration to the West and the construction of the Berlin Wall in 1961. Ask students: Why was it important that the physical barrier of the Berlin Wall be destroyed in order for conditions in East Germany to improve? What was the effect of the Berlin Wall and its fall on migration?

- ★ **Case Study 2:** Have students look at census data from 1980, 1990 and 2010. What push-pull factors were in place to encourage migration from Central America to the U.S.? Have students write a summary statement about the role it played on migration.

CHAPTER 12: CULTURAL DIFFUSION AND CONVERGENCE

Focus Question: *How do cultural divergence and convergence lead to change?*

Lesson Development: Using a map, ask students to identify all of the countries of the world that use the English language as a primary or secondary language. Trace the route that the English language has taken to arrive in that area of the world. How did the arrival of English change that society? Have students use *Google* or a similar search engine to find a new high-tech device such as an iPod or iPhone. Locate a website selling that item and have students discuss if there are any places in the world today where a consumer could not purchase this item. What is the significance of this global marketplace to cultural convergence?

CHAPTER 13: HISTORICAL CHANGE

Focus Question: *How does physical geography change over time?*

Lesson Development: Have students list the causes of change to the physical features of the Earth today, such as erosion and climate, and describe what problems these changes have brought to the Earth's surface. After completing the list, ask students to select one of the changes they have identified and to participate in a problem-based learning activity. They should define the problem, state assumptions, gather data, provide solutions, rank solutions, and then choose and verify the best solution to the problem.

Focus Question: *What are the major factors in human geography that cause change?*

Lesson Development: After completing the graphic organizer on page 221 of *Mastering the TEKS for World Geography*, ask students to select one of the factors listed that can cause change in human geography and complete a storyboard on the factor chosen, such as migration. The storyboard can be produced by using software downloaded free from the Internet (Photo Story 3), student illustrations, visuals clipped from magazines or other media to present the information. The student should conclude their storyboard with how the human geographic factor they chose produces cultural change.

CHAPTER 14: TYPE OF GOVERNMENT

Focus Question: *What is the purpose of government?*

Lesson Development: Give students the following famous quotation: "Power tends to corrupt and absolute power corrupts absolutely," by Lord Acton, and ask them to interpret what Acton meant. After this discussion on the meaning of the quotation, ask students to complete a compare/contrast chart on how power is distributed in different types of government. Examples of topics for the compare/contrast chart: Country, Type of Government, Leader's Role, Citizenship Practices, and Rights and Responsibilities of the People. Ask students to give examples of how a country's type of government affects the individual rights of its people and their ability to participate in government.

CHAPTER 15: NATIONS: BORDERS AND POWER

Focus Question: *What factors influence political boundaries and power?*

Lesson Development: Have students select a country in Central America and locate a political map of that country. Identify the influences on this country's political, economic, and social power. Analyze how this country's current political, economic, and social power affects migration to and from this country.

- ★ **Case Study 1:** Ask students to review the Pope's sixteenth-century "Line of Demarcation" between the possessions of Spain and Portugal. How did this policy affect settlement of the New World and how did it define the power there? How does this past decision still affect current political affairs?
- ★ **Case Study 2:** Have students review the Missouri Compromise passed in 1820 by the US Congress between pro-slavery and anti-slavery factions. This compromise created a political boundary dividing slave and free states at the 36°30' parallel, except within the boundaries of the proposed state of Missouri. Ask students to analyze how this decision affected the United States politically, socially and economically.

Focus Question: *How has the European Union influenced international relations?*

Lesson Development: Ask students to research the European Union (EU). Have them identify the factors that created the European Union and consider the impact that the creation of this organization has had on the use of European natural resources and the development of new technologies.

CHAPTER 16: POLITICAL PROCESSES AND CITIZENSHIP

Focus Question: *How do different points of view influence government policy?*

Lesson Development: Have students simulate a city council meeting by placing them in small groups that represent different points of view on a zoning issue. The proposal before the council is a permit request to build a dirt bike path in close proximity to a housing neighborhood. Place students in groups representing a neighborhood association, the land developer for the dirt bike path, company executives from a well-known bike company, and members of an anti-noise environmental group. Ask student groups to prepare arguments to present at the city council meeting and select one member to make the presentation. Simulate the meeting and then after the groups have presented their statements to the city council and the council members have reached a decision on the issue, ask students to reflect on how government leaders are influenced by the points of view of citizens. Extend the discussion to the national and international levels and discuss how the points of view of interested parties can influence government leaders at all levels. Conclude the activity by having students write a short essay on the following prompt: "To what extent is public opinion a driving force behind government decisions?"

CHAPTER 17: ECONOMIC SYSTEMS

Focus Question: *How do economic systems solve the problem of scarcity?*

Lesson Development: Complete the graphic organizer on page 287 describing the economic systems of the world. Place students into small groups representing each of the four economic systems, and have each group create a PowerPoint presentation on how its economic system strives to solve the problem of scarcity. The PowerPoint should answer these three questions: What to produce? How to produce? For whom to produce? After viewing the presentations of different groups, ask students to rank each economic system on how well it solves the problem of scarcity.

CHAPTER 18: ECONOMIC DEVELOPMENT

Focus Question: *How can less developed nations advancing their standards of living?*

Lesson Development: Give students this scenario: A billion-dollar company is looking to invest and move its headquarters to one of these countries: Qatar, China, Botswana, Azerbaijan, Republic of Congo, Angola, East Timor, Iraq, Liberia, Afghanistan, Uzbekistan, or Turkmenistan. Ask different groups of students to choose one of these countries and to research its average life expectancy, infant mortality rate and literacy rate. Then have students discuss which country offers the best opportunity to grow a business, and how the development of that country might be further promoted through social programs. Finally, ask students to make their choice for placing the new headquarters, to explain their reasoning, and to determine what social programs should be implemented to assist that country.

Have students to review the following information: “Microbanks” are offering low-interest loans to people who do not qualify for loans from traditional banks. Ask students to think about how low-interest loans might help some women in poverty. Then have them look up, using Google or a similar search engine, “Muhammad Yunus: Social Business” and review his plan in Bangladesh. http://www.grameen-info.org/index.php?option=com_content&task=view&id=19&Itemid=114 Have them read about his process and analyze how his actions have helped Bangladesh raise its level of economic development.

Focus Question: *What is the connection between the levels of development and different types of economic activities?*

Lesson Development: Have students define primary, secondary, tertiary and quaternary economic activities, and provide examples of each. Then ask students to research the main types of economic activities found in Mexico and classify them. What is Mexico’s level of economic development? How did NAFTA change Mexico’s typical economic activities? How are current concerns with drug trafficking affecting Mexico’s economic development?

CHAPTER 19: THE CHALLENGES OF GLOBALIZATION

Focus Question: *How does globalization affect you?*

Lesson Development: Have students choose 25 items from their classroom or home and write down where these items are from around the globe. Then, using a map, identify the location of these items and the possible paths these items took before arriving in the United States. Are there any trends? Have students predict the changes they think globalization will bring about in future.

HOW THIS BOOK UTILIZES THE MOST RECENT SCIENTIFIC RESEARCH ON STUDENT LEARNING

Both federal and state laws require educators to use scientifically-based methods to help their students attain proficiency. *Mastering the TEKS in World Geography* is based on the latest educational research.

CONCEPT-BASED LEARNING

In 1999, the National Research Council concluded in *How Students Learn* that:

- ★ “To develop competence in an area of inquiry, students must:
 - a) have a deep foundation of factual knowledge;
 - b) understand ideas **in the context of a conceptual framework**; and
 - c) organize knowledge to facilitate retrieval and application.”
- ★ “A metacognitive approach to instruction can help students learn to take control of their own learning by defining learning goals and monitoring their progress in achieving them.”

Mastering the TEKS in World Geography applies these findings by providing a complete review of the “Core Curriculum” and by helping students master the knowledge needed for social studies literacy in today’s world. Facts and ideas are presented in the “context of a conceptual framework.”

Based on current educational research, this book organizes the World Geography TEKS into meaningful concepts that students can easily assimilate, with frequent reinforcement and multiple opportunities for interaction. To emphasize the importance of key concepts, most major concepts are presented multiple times in the *Important Ideas*, *Geographic Terminology*, *Essential Questions*, *Learning with Graphic Organizers*, *Applying What You Have Learned* activities, and *Acting as an Amateur Geographer*, *Study Cards*, *Concept Map*, and practice test questions.

The effectiveness of emphasizing concepts, chunking information, and using advance organizers and concept maps has been well documented by recent educational research. Chunking information is the breaking down of information into “bite-sized” pieces so that the brain can more easily digest new information.

The importance of “chunking information” has been illustrated by Harvard psychologist George A. Miller in his article, “The Magical Number Seven, Plus or Minus Two.” Miller studied short-term memory — how many numbers people can be reliably expected to remember a few minutes after having been told these numbers only once.

Miller contended that short-term memory could only hold 5-9 chunks of information where a chunk is any meaningful unit. The relevance of Miller’s article goes beyond just numbers. The chunking principle requires us to classify items into groups to reduce an overload of information. If a learner’s working memory is full, the flood of excess information will just drop out or disappear.

Thus, if a student is reading a complicated text, the student must hold several factors in mind to understand it. Comprehension and memory are greatly assisted if the information appears in bite-size pieces so that their student's mind can more easily absorb it. This "chunking of information" has been a guiding principle in presenting content information throughout this book. Large units of information are divided into smaller chunks, making them easier to understand and absorb.

Knowledge is stored in the brain in the form of propositions, or schemata, that provide memory content. Because concept maps are constructed to reflect the organization of the memory system, they facilitate meaningful learning by the individuals that use them. See J.R. Anderson and C. Lebiere, C., *The Atomic Components of Thought* (Mahwah, N.J. 1998); Erlbaum and J.R. Anderson, M.D. Byrn, S. Douglass, S., C. Lebiere, and Y. Qin, "An Integrated Theory of the Mind." *Psychological Review*, (2004), Volume 111, pages 1036-1050. See also D. Ausubel, J. Novak, and H. Hanesian, *Educational Psychology: A Cognitive View* (New York: Holt, Rinehart & Winston, 1978); J. Brandsord, *Human Cognition: Learning, Understanding and Remembering* (Belmont, C.A.: Wadsworth, 1979); R. Gagné, *The Conditions of Learning* (3rd edition) (New York: Holt Rinehart & Winston, 1977); Gary McKenzie, "The Importance of Teaching Facts in Social Studies Education," *Social Education*, Vol. 44, (1980), pp. 494-498; R. Mayer, "Twenty Years of Research on Advance Organizers: Assimilation Theory Still the Best Predictor," *Instructional Science*, vol. 8 (1979), pp. 133-167; J. Howard, "Graphic Representations as Tools for Decision Making, *Social Education*, vol. 68 (2001), pp. 220-223.

WORD WALLS

A *Word Wall* is unfamiliar to some high school teachers. *Word Walls* provide an important means of promoting the growth of specialized social studies vocabulary. Educational research supports the learning of content vocabulary as an explicit activity. A *Word Wall* can build prior knowledge, provide contextualized information, and provide students with high-frequency words that will be encountered in the content chapters. This makes a *Word Wall* an extremely effective learning and teaching tool (see Cunningham, P.M. & Allington, R.L. *Classrooms That Work: They Can All Read and Write*: Addison-Wesley Educational Publishers Inc., 1999).

Word Walls also provide a reference for students since these same words will later appear in bold print in context in the chapter. *Word Walls* provide a visual map to help students remember connections between words. They help students to develop a list of words as part of their social studies vocabulary. See Wagstaff, J.M. "Teaching Reading and Writing with Word Walls," *Scholastic Magazine*, (1999). Students are encouraged to make their own personal glossaries or *Study Cards* from the *Word Walls*.

STUDY CARDS

Mastering the TEKS in World Geography makes extensive use of *Study Cards*. Thomas Himes (*Study Skills for All Ages: A Sourcebook*) refers to a system with flashcard drills as "efficient recitation designed for remembering texts in detail." He further suggests that this type of learning can be especially useful for memory-intensive content. Drilling with *Study Cards* is more efficient than simply repeating information because more time is spent on those items that actually need to be learned.

Flashcard drills are also efficient because they make use of spans of time, both short and long, that otherwise do not contribute to learning course content. See Preston, Ralph, *Teaching Study Habits and Skills*, (Rinehart, 2006); Robert Kranyik and Florence V. Shankman, *How to Teach Study Skills* (Teacher's Practical Press, 1963); and Marvin Cohn, *Helping Your Teen-age Student: What Parents Can Do to Improve Reading and Study Skills* (Dutton, 1979).

USE OF INQUIRY APPROACH

The chapters in this book help students to gain greater knowledge through the inquiry approach in many of the *Applying What You Have Learned* and *Acting as an Amateur Geographer* activities throughout the book. See Steven Olson, *Inquiry and the National Social Studies Educational Standards* (National Academies Press, 2000).

THE USE OF GUIDED PRACTICE

Guided practice provides students the opportunity to grasp and develop concepts or skills and requires teachers to monitor student progress. Guided practice is not simply assigning a worksheet, problems, or questions to be completed in class. The use of *guided practice* can greatly assist students to organize their learning and eliminate confusion as well as reinforce the major points to be learned. Researchers have stressed the need for students to practice new knowledge and skills under direct teacher supervision. This is not always possible in a larger urban classroom setting.

Learning a new skill is like wet cement; it is easily damaged. An error at the beginning of learning can be more easily corrected than after it is set.. Recent cognitive research has shown that we have a window of approximately 6-8 hours to correct inaccurate information/skills before they becomes permanently encoded. Therefore, a check for understanding and guided practice must be implemented before students begin independent practice. See M. Harmin, *Inspiring Active Learning: A Handbook for Teachers* (Alexandria, VA: Association for Supervision and Curriculum Development 1994), pp. 44-45; Gary Borich, *Effective Teaching Methods*, Sixth Edition. (Columbus, Ohio: Prentice-Hall/Merrill, 2007).

For most students, the direct instruction in specific study skills has been an effective area of learning. However, there are some students who need a more systematic, guided approach in learning certain skills in a purposeful manner. See Pearson, P.D. and Gallagher, M., "The Instruction of Reading Comprehension," *Contemporary Educational Psychology*, Volume 8, (1983).

Many students have difficulty working independently and spontaneously answering multiple-choice questions. Even when they have been taught specific study strategies, they may fail to see their purpose or value. They need to be given actually practice that is relevant to these strategies using some form of guidance. See M. Harmin, *Inspiring Active Learning: A Handbook for Teachers*, (Alexandria, VA: Association for Supervision and Curriculum Development, 1994).

Guided practice is important for all learners, especially low achievers. The effectiveness of guided practice can be evaluated by measuring subsequent student performance in independent practice. See Rosen, A. "Knowledge Use in Direct Practice," *Social Service Review*, 1994, Volume 68, pp. 561-77.

VISUAL LEARNING

Students are less capable of learning complex concepts and facts when their knowledge frameworks are weak or unorganized. Visual learners benefit when they are shown pictures, graphs, maps and graphic organizers — such as webs, concept maps and Venn diagrams. These are some of the best techniques used in visual learning to enhance thinking and learning skills. When information is presented spatially with visual imagery, students are better able to grasp meaning, reorganize and group similar ideas easily, and make better use of their visual memory.

All of these visual techniques are used in ***Mastering the TEKS in World Geography***. See R. Bartoletti, *How Good Visual Design Helps Learning* (American Psychological Association Publication Manual, 2008). Also see J.D. Novak, J. D., *Learning, Creating and Using Knowledge: Concept Maps as Facilitative Tools in Schools* (Trenton, NJ: Lawrence Erlbaum Associates, Inc., 1998).

LEARNING WITH GRAPHIC ORGANIZERS

Throughout the book, there are special *Learning with Graphic Organizer* sections. There is a fundamental educational basis for these graphic organizers. Random, disconnected factual information often quickly passes out of the brain. However, the mind's ability to store images is boundless. A graphic organizer is a diagram or illustration of a written statement. The goal of these graphic organizer is to allow students to organize ideas and examine relationships. In doing this, students employ more of their thinking skills and process information more intensely, helping to improve long term recall. Since the brain likes to chunk information, a graphic organizer complements the way the brain works naturally. See Bromley, K., Irwin-DeVitis, and Modlo, M., *Graphic Organizers* (New York: Scholastic Professional Books, 1995). Graphic organizers are therefore helpful for all types of learners, from under-achievers to gifted learners. The process of seeing information organized graphically helps learners arrange the material in their minds. See Hall, Tracey and Strangman, Nicole. "Graphic Organizers," *National Center on Accessing the General Curriculum Publications*, (2005).

Requiring students to complete their own graphic organizers compels them to demonstrate their understanding and helps them clarify their thinking. Students must not only move words but focus on their connections. A large amount of information can be viewed in a single figure that provides a broad overview of a topic. Graphic organizers are also wonderful learning tools for students who are primarily visual learners. See Marzano, Robert, Debra Pickering, and Jane E. Pollack. *Classroom Instruction that Works: Research Based Strategies for Increasing Student Achievement* (Alexandria, VA: ASCD, 2001).

METACOGNITIVE APPROACH TO SKILLS INSTRUCTION

Mastering the TEKS in World Geography provides metacognitive instruction in data-interpretation skills and test-taking strategies.

Metacognition refers to a level of thinking that involves active control over the thinking process that is used in learning. It refers to a learner's self-awareness and ability to understand, control, and manipulate his or her own cognitive processes. For example, metacognitive skills include taking conscious control of learning, planning and selecting strategies, monitoring the progress of learning, correcting errors, analyzing the effectiveness of learning strategies, and changing one's behavior and strategies when necessary. See D.S. Ridley, P.A. Schutz, and R.S. Glanz, "Self-regulated Learning: The Interactive Influence of Metacognitive Awareness and Goal-setting," *Journal of Experimental Education*, Volume 60 (1992).

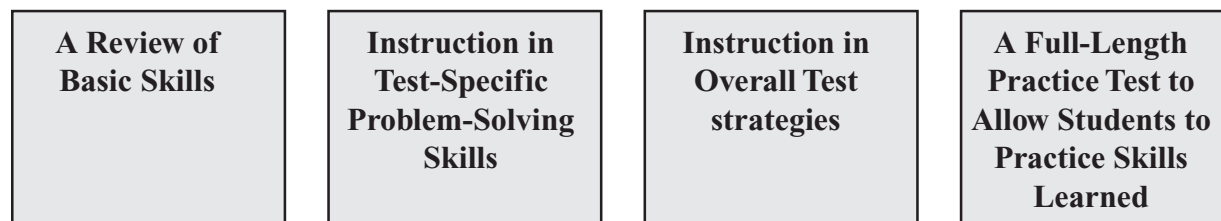
Metacognitive skills are important not only in school, but throughout life. As students become more skilled at using metacognitive strategies, they gain confidence and become more independent as learners. See, e.g., I. Gaskins, I. and T. Elliot, *Implementing Cognitive Strategy Training across the School: The Benchmark Manual for Teachers* (Cambridge, MA: Brookline Books, 1991); *How Students Learn: History, Mathematics and Science in the Classroom* (National Research Council, 2005).

A large body of educational research supports the effectiveness of explicit instruction in metacognitive thinking skills, such as data interpretation, comparing, drawing conclusions, and finding cause-and-effect relationships. See, e.g., J.E. Baron and R.J. Steinberg, *Teaching Thinking Skills: Theory and Practice* (New York: W.H. Freeman); B.K. Beyer, "Teaching Critical Thinking: A Direct Approach," in *Social Education*, Vol. 49 (1985); J. Onosko, "Barriers to the Promotion of Higher Order Thinking in Social Studies," *Theory and Research in Social Education*, vol. 19, (1991), pp. 341-366.

EXPLICIT TEST-TAKING STRATEGIES

Research-based evidence demonstrates that students can improve their test scores substantially by practicing with the actual test format. See, e.g., Thomas Scruggs and Margo Mastropieri, *Teaching Test-Taking Skills* (Brookline, 1992); J.B. Schumaker, *et al*, "Teaching Routines for Content Areas at the Secondary Level," G. Stover *et al*, *Interventions for Achievement and Behavior Problems* (Washington, D.C.: National Association of School Psychologists, 1991).

Scientific, research-based evidence demonstrates that a successful test preparation program includes four key components:



See Rubinstein, Jeff, "Test Preparation: What Makes It Effective?" in *Assessment Issues for Teachers, Counselors, and Administrators*, ed. by Janet Wall and Garry Walz (Austin, Texas: Pro-Ed, Inc., 2003).

Mastering the TEKS in World Geography provides all four of these components:

- (1) introductory chapters review basic skills;
- (2) content-rich chapters provide a thorough subject matter review, with skills practice and sample questions;
- (3) our unique “E-R-A” approach provides a metacognitive test strategy for answering multiple-choice questions; and
- (4) the final chapter provides a complete practice test to allow students to practice the skills and apply all the knowledge they have learned.

A wide variety of question types are provided at the end of each chapter. As students answer each type of question found on the test, they begin to develop their own strategies for selecting the correct answer. This allows students to practice and more fully develop the strategies they need for answering questions on their own. In the last chapter of the book, students apply the strategies they have learned to approaching different types of questions based on all the historical periods covered in the book. *Mastering the TEKS in World Geography* also makes it easier for even slow learners to assimilate higher-level skills and concepts, better preparing them for the test. When they have completed all of the question types, they will have effectively practiced taken the test several times.

GEOGRAPHY INSTRUCTION THAT WORKS

Robert Marzano, Debra Pickering and Jane Pollack, *Classroom Instruction that Works* (Association for Supervision and Curriculum Development, 2001) have synthesized current research to identify nine teaching strategies. All of these strategies are used in *Mastering the TEKS in World Geography*:

IDENTIFYING SIMILARITIES AND DIFFERENCES

The ability of students to break apart a concept into its similar and dissimilar characteristics fosters greater understanding of complex problems. When teachers present similarities and differences, supplemented by discussion and inquiry, student understanding is greatly enhanced. Research consistently demonstrates that student-directed activities broaden understanding. Moreover, research notes that graphic formats are an excellent method to represent similarities and differences.

Throughout the book, students are asked to find similarities and differences between geographic areas (see pp. 78 and 266). In addition, students create Venn diagrams and make charts to compare areas (see pp. 80 and 241).

SUMMARIZING

The skill of summarizing promotes student comprehension by asking students to analyze a subject, and identify what is essential about it and then recreate it in their own words. Research indicates that when students summarize, they are substituting and deleting, while keeping other aspects of the information presented. Students are asked to create summaries (see pp. 28, 51, 53, 87 and 98). Students also do selective underlining (see p. 58). Throughout the book, students also “Read-Recall-Check-Summarize” by applying the “E-R-A” approach to answer multiple-choice questions (see pp. 4, 5, and 8).

COOPERATIVE LEARNING

Research indicates that when students are organized into cooperative groups, there is a positive effect on overall learning. These groups should be kept small. There are multiple projects throughout this book that ask students to engage in cooperative learning activities: discussion techniques (see pp. 47 and 130); “Think-Pair-Share” (see pp. 154 and 155); and brainstorming (see p. 45).

NOTE-TAKING

The book requires students to take notes (see pp. 51 and 52), to create and work with outlines (see p. 54); to create two-column notes (see pp. 109, 251, and 287), and to formulate “Main Idea-Detail Notes” (see p. 28).

HOMEWORK AND PRACTICE

An excellent method to extend student learning outside of the classroom is to assign homework. Here, research indicates that the amount of homework assigned needs to be appropriate to grade level. Teachers need to explain the rationale for homework to the student, and teachers should try to provide their students with feedback on all homework assignments. Throughout this book, there are numerous opportunities to assign the material to students for homework. *Applying What You Have Learned*, *Learning with Graphic Organizers*, *Acting as an Amateur Geographer*, and *Checking Your Understanding* sections can all be assigned for homework. One of the greatest strengths of this book is there are a large number of questions for students to answer to practice what they have learned.

GENERATING AND TESTING HYPOTHESES

Research shows that whether a hypothesis is induced or deduced, the hypothesis and conclusion must be plainly explained by students. Here, students create geographic questions for a proposed research paper, (see pp. 48 and 268) and receive extensive practice in metacognition throughout the book, (see pp. 53 and 55).

CUES, QUESTIONS, AND RELATIONSHIPS

When students use what they already know with cues, questions, and advance organizers, this enhances further learning. Research shows that these tools need to focus on what is most important when they are presented prior to a student’s learning experience. In this book, *Essential Questions* ask students to address “higher-order” thinking questions. Throughout the book, students are presented with questions and tasks asking them apply what they have learned. In addition, at the end of every content chapter, there is a *Checking Your Understanding* section. The first question is fully explained to show how the correct answer can be reached.

NON-LINGUISTIC REPRESENTATIONS

Research shows that knowledge is stored both linguistically and visually. The more frequently students are called upon to use both forms, the greater the opportunity they will have to assimilate new concepts and information. Use of nonlinguistic representations has been proven to stimulate increased brain activity. Throughout the book there are frequent non-linguistic representations in the form of concept maps, graphic organizers, free-form maps, and pictures. Students also complete their own non-linguistic representations by drawing on *Study Cards* and making graphic organizers of their own.

ADVANCE ORGANIZERS

Every content chapter opens with an advance organizer that tells students what they will find in each chapter. In addition, each unit also contains a graphic organizer that presents students with what each chapter in that unit covers. Each unit concludes with a “Quick-Write” where students are encouraged to review the most important information in the unit.

See *Classroom Instruction that Works*, by Robert Marzano, Debra Pickering, and Jane Pollock, (Alexandria, VA: Association for Supervision and Curriculum Development, (2001). See also *Creating Independence through Student-owned Strategies*, by Carol Santa, Lynn Havens, and Evelyn Maycumber, (Dubuque, IA: Kendall/Hunt, 1996); *Comprehension Instruction: Research-Based Best Practices*, by Cathy Collins Block and Michael Pressley, (New York: Guilford Press, 2002); and *What Works in the High School: Result-based Staff Development*, by Joellen Killion, National Staff Development Council, (2002).

ANSWERS TO CHAPTER QUESTIONS

CHAPTER 1: HOW TO ANSWER MULTIPLE-CHOICE QUESTIONS

Page	Question #	Answer	Page	Question #	Answer	Page	Question #	Answer
6	1	B	11	4	F	14	7	A
9	2	G	12	5	A	15	8	C
11	3	D	13	6	G			

CHAPTER 2: HOW TO ANSWER DATA-BASED QUESTIONS

Page	Question #	Answer	Page	Question #	Answer	Page	Question #	Answer
18	1	A	21	6	J	24	11	B
18	2	G	21	7	C	25	12	H
19	3	C	22	8	F	25	13	B
19	4	J	22	9	D	28	14	B
21	5	C	24	10	H			

CHAPTER 3: UNDERSTANDING MAPS

Page	Question #	Answer	Page	Question #	Answer	Page	Question #	Answer
41	1	C	42	5	A	43	9	B
42	2	G	42	6	H	43	10	G
42	3	D	43	7	D	43	11	B
42	4	F	43	8	H	43	12	J

CHAPTER 4: PROBLEM-SOLVING AND RESEARCH SKILLS

Page	Question #	Answer	Page	Question #	Answer	Page	Question #	Answer
58	1	A	59	5	C	60	9	C
59	2	J	59	6	G	60	10	G
59	3	D	60	7	B	60	11	C
59	4	F	60	8	J			

CHAPTER 5: PHYSICAL GEOGRAPHY

Page	Question #	Answer	Page	Question #	Answer	Page	Question #	Answer
81	1	A	82	6	F	83	11	B
81	2	G	82	7	C	83	12	F
81	3	D	82	8	H	83	13	A
82	4	G	83	9	A	83	14	H
82	5	D	83	10	J	83	15	A

CHAPTER 6: PROCESSES SHAPING PLANET EARTH

Page	Question #	Answer	Page	Question #	Answer	Page	Question #	Answer
101	1	D	102	4	H	103	7	A
102	2	H	102	5	A	103	8	J
102	3	A	103	6	G	103	9	B

CHAPTER 7: PEOPLE AND NATURE

Page	Question #	Answer	Page	Question #	Answer	Page	Question #	Answer
116	1	D	117	4	G	118	7	C
117	2	G	118	5	B	118	8	G
117	3	D	118	6	G	118	9	C

CHAPTER 8: ASPECTS OF CULTURE

Page	Question #	Answer	Page	Question #	Answer	Page	Question #	Answer
138	1	D	139	6	G	140	11	C
138	2	J	139	7	C	140	12	G
138	3	C	139	8	H	140	13	B
139	4	H	139	9	A			
139	5	B	140	10	H			

CHAPTER 9: CULTURAL REGIONS

Page	Question #	Answer	Page	Question #	Answer	Page	Question #	Answer
156	1	B	157	5	A	158	9	A
157	2	F	157	6	H	158	10	D
157	3	D	158	7	C			
157	4	J	158	8	J			

CHAPTER 10: DEMOGRAPHY

Page	Question #	Answer	Page	Question #	Answer	Page	Question #	Answer
172	1	C	173	4	F	174	7	B
172	2	G	173	5	D	174	8	H
172	3	A	174	6	G	174	9	D

CHAPTER 11: MIGRATION

Page	Question #	Answer	Page	Question #	Answer	Page	Question #	Answer
184	1	C	185	5	B	186	9	D
184	2	H	185	6	J	186	10	G
185	3	D	186	7	C			
185	4	H	186	8	H			

CHAPTER 12: CULTURAL DIFFUSION AND CONVERGENCE

Page	Question #	Answer	Page	Question #	Answer	Page	Question #	Answer
204	1	D	205	4	H	206	7	C
205	2	H	206	5	A	206	8	F
205	3	C	206	6	H	206	9	D

CHAPTER 13: HISTORICAL CHANGE

Page	Question #	Answer	Page	Question #	Answer	Page	Question #	Answer
223	1	B	223	4	D	224	7	B
223	2	A	223	5	C			
223	3	C	224	6	A			

CHAPTER 14: TYPES OF GOVERNMENT

Page	Question #	Answer	Page	Question #	Answer	Page	Question #	Answer
237	1	D	238	3	B	238	5	D
238	2	G	238	4	G	238	6	F

CHAPTER 15: NATIONS: BORDERS AND BOUNDARIES

Page	Question #	Answer	Page	Question #	Answer	Page	Question #	Answer
252	1	C	254	4	H	254	7	C
253	2	G	254	5	A			
253	3	C	254	6	G			

CHAPTER 16: POLITICAL PROCESSES AND CITIZENSHIP

Page	Question #	Answer	Page	Question #	Answer	Page	Question #	Answer
270	1	C	271	4	H	272	7	A
271	2	G	272	5	B	272	8	J
271	3	C	272	6	H			

CHAPTER 17: ECONOMIC SYSTEMS

Page	Question #	Answer	Page	Question #	Answer	Page	Question #	Answer
288	1	B	290	7	C	291	13	C
289	2	H	290	8	G	291	14	J
289	3	D	290	9	D	291	15	C
289	4	H	290	10	G	291	16	J
289	5	A	290	11	C			
289	6	H	291	12	F			

CHAPTER 18: ECONOMIC DEVELOPMENT

Page	Question #	Answer	Page	Question #	Answer	Page	Question #	Answer
300	1	D	301	6	H	302	11	D
301	2	H	301	7	B	303	12	G
301	3	A	302	8	H	303	13	A
301	4	G	302	9	B	303	14	H
301	5	B	302	10	F			

CHAPTER 19: THE CHALLENGES OF GLOBALIZATION

Page	Question #	Answer	Page	Question #	Answer	Page	Question #	Answer
323	1	D	324	4	H	325	7	C
324	2	H	324	5	C	325	8	G
324	3	B	325	6	G	325	9	B

CHAPTER 20: A PRACTICE WORLD GEOGRAPHY END-OF-COURSE TEST

Page	Question #	Answer	Page	Question #	Answer	Page	Question #	Answer
328	1	B	335	24	F	342	47	C
329	2	G	335	25	D	342	48	F
329	3	B	335	26	H	342	49	B
329	4	G	335	27	B	342	50	H
330	5	D	336	28	G	343	51	B
330	6	H	336	29	A	343	52	H
330	7	A	337	30	F	343	53	C
330	8	F	337	31	D	343	54	H
330	9	B	337	32	G	343	55	A
330	10	J	338	33	C	344	56	G
331	11	B	338	34	F	344	57	A
331	12	F	338	35	B	345	58	G
331	13	D	338	36	G	345	59	C
331	14	G	339	37	B	345	60	H
331	15	B	339	38	H	345	61	C
331	16	G	339	39	D	345	62	J
332	17	D	339	40	H	345	63	C
332	18	H	340	41	C	346	64	H
333	19	B	340	42	F	346	65	C
333	20	G	341	43	C	346	66	H
334	21	A	341	44	G	347	67	C
334	22	H	341	45	D	347	68	J
334	23	C	342	46	G			