

FROM THE MAKERS OF THE ACT®

THE
OFFICIAL
ACT®

READING GUIDE

THIRD EDITION

A Step-by-Step Guide Outlining the Preparation for the ACT®

FEATURES

- The only book with real ACT® reading questions organized by question type
- Includes tips and advice for reading more quickly and retaining information
- Includes 100s of official ACT® questions with answers and explanations

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Table of Contents

[Cover](#)

[Table of Contents](#)

[Title Page](#)

[Copyright](#)

[Introduction](#)

[Chapter 1: An Overview of the ACT Reading Test](#)

[The Structure of the ACT Reading Test](#)

[Timing and Pacing](#)

[Checking Your Answers](#)

[Taking a Diagnostic Practice Test](#)

[Using This Guide](#)

[Chapter 2: General Reading Skills](#)

[Skimming](#)

[Scanning](#)

[Speed Reading](#)

[Annotating](#)

[Chapter 3: Test-Taking Approaches](#)

[Invest Most of Your Time in Answering the Questions](#)

[Invest Your Time in Reading Upfront](#)

[Save Your Weakest Passage for the End \(Best for Paper-Based Testing\)](#)

[Answer Every Question](#)

[Chapter 4: Wrong Answer Types](#)

[Common Wrong Answer Types](#)

[Chapter 5: Skills and Reporting Categories](#)

Key Ideas and Details (44%-52%)

Craft and Structure (26%-33%)

Integration of Knowledge and Ideas (19%-26%)

Chapter 6: Key Ideas and Details

Main Idea Questions

Locating and Understanding Details

Drawing Conclusions and Making Inferences

Summarizing

Paraphrasing Complex Ideas

Comparative Relationships

Sequence of Events

Cause-and-Effect Relationships

Shifts and Trends

Chapter 7: Craft and Structure

Using Context Clues

Word-Meaning Questions

Vocabulary Strategies

Interpreting Figurative Language

Perspective and Point of View

The Primary Purpose of the Passage

Text Structure

Function

Chapter 8: Integration of Knowledge and Ideas

Argument Questions

Synthesis Questions in Paired Passages

Visual and Quantitative Information Questions

Chapter 9: Passage Types

Literary Narrative Genre Conventions

[Social Science and Humanities Genre Conventions](#)

[Natural Science Genre Conventions](#)

[Paired Passages](#)

[Passages with a Visual and Quantitative Element](#)

[Chapter 10: Practice Questions](#)

[Chapter 11: Answers and Explanations](#)

[Answer Key: Practice Test 1](#)

[Explanatory Answers: Practice Test 1](#)

[Answer Key: Practice Test 2](#)

[Explanatory Answers: Practice Test 2](#)

[Answer Key: Practice Test 3](#)

[Explanatory Answers: Practice Test 3](#)

[Answer Key: Practice Test 4](#)

[Explanatory Answers: Practice Test 4](#)

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Introduction

The ACT tests measure your understanding of what you've been taught in core high school courses. This guide will help you prepare for the ACT reading test. Reading is a skill you have been practicing throughout your academic career. The ACT reading test is a chance to show what you have learned up until this point. The passages you'll be reading may not always reflect your personal interests. Some of them may cover topics that are rather unfamiliar to you. Luckily, you already have the skill set needed to succeed, even if the test sometimes takes you out of your comfort zone.

The following chapters contain items (questions) that are representative of the items you'll see when taking the ACT test. Some have appeared on actual ACT tests. These sample questions are aimed at enhancing your understanding of the knowledge and skills needed to succeed on the exam. Each question is followed by a detailed explanation of the answer. Chapters are organized by question type and passage type, which should help you see the patterns among the questions. This guide will familiarize you with the content of the test and take you through some reading skills exercises. It will also provide strategies for approaching the questions, and it includes content-specific test-taking tips.

We want you to be confident when it's time to take the ACT reading test. Remember that you have already been practicing and improving upon the skills we'll be discussing. You just need to learn more about how to harness those skills when taking the test.

Chapter 1: An Overview of the ACT Reading Test

The Structure of the ACT Reading Test

The ACT reading test consists of four sections, each of which is composed of a passage, or pairs of passages, and nine multiple-choice questions. The passages include both literary narrative and informational texts from the humanities, natural sciences, and social sciences and are representative of the types of texts that students might encounter in high school and first-year college courses. Informational passages may include a visual and quantitative element (such as a graph, chart, diagram, or table) that accompanies the passage and contains additional information related to the passage's main topic. Most passages will be between approximately 650 and 750 words. Paired passages sets, which can be either informational or literary narrative, consist of two shorter passages that together equal approximately 650 or 750 words. If you think of the reading test as four separate sections, you have 10 minutes for each section. You will have 40 minutes to answer 36 questions (27 of these questions will be scored).

Literary Narrative

The literary narrative passages are excerpts from novels, short stories, or memoirs. Literary narrative does not include poems or scripts from plays. The excerpts typically

include two to three characters. These passages focus primarily on characterization developed through the dialogue, actions, and thoughts relayed through the narrator. Though a conflict may be established at some point in the narrative, there is rarely a full story arc with a climax or resolution. Typically, a passage introduces only the characters. Most passages end with what might be considered a cliff hanger. Some insights are revealed about the dynamics between the characters, but very little action takes place. Though many literary narrative passages begin at a point of change in a character's life, the characters tend to remain static without undergoing dramatic changes over the course of the passage. You may see a paired literary narrative passage on the test, but you will never see a literary narrative passage complemented with a visual element like a table or chart.

Humanities and Social Science Passages

Humanities and social science passages tend to address human beings and their relationships with one another, the world around them, and their shared history. Humanities passages can cover topics such as literary criticism, philosophy, music, dance, and film. Social science passages cover topics such as economics, sociology, anthropology, and history. Both humanities and social science passages have a main point or purpose and can be explanatory or persuasive.

Natural Science

Natural science passages can vary, sometimes introducing an obscure scientific topic, explaining significant scientific studies, or describing a science-related problem. Some

science passages go into great depth about experiments, and others just summarize the theories of different scientists.

A note about informational passages: Although there may be some unfamiliar terms used in informational passages in particular, you are not expected to know what they mean. Much of the time, the terms will be defined for you in the passage, or context may make it possible for you to discern the meaning. On the reading test, no outside knowledge is needed to answer the questions. All of the information you need to answer the questions correctly can be found in the passage.

You may see a paired passage in any of the informational genres. Also, a humanities, social science, or natural science passage could be complemented with a visual element, like a table or chart.

Timing and Pacing

Your study plan should involve reviewing the content of this guide and taking timed practice tests to determine if you are retaining and applying what you have learned. You do not need to take your first practice test under timed conditions, but, eventually, you should practice using the correct pacing (10 minutes for each set of reading questions). Many test centers will have an analog clock, and if you take the test on the computer, you will have access to a built-in timer. You can also bring a digital watch as long as it's not a smart watch (you will have to turn off any sounds or alerts for testing). Try to practice with an analog clock or digital watch instead of using your phone's timers to time yourself during practice tests because you won't be able to use your phone during the actual test. You should also practice taking a full test in one sitting in the

morning in order to mimic the testing conditions. Additionally, you should not read sentences out loud when you take practice tests because you will not be able to do this during the actual test.

The complete ACT test is always given in the same order. A break is given after the first two tests (English and math) are completed. You may feel a bit energized as you head into test three, which is reading. But you may also have to take a moment before the test starts to refocus on the task at hand. If you do not have time to complete a full-length practice ACT, try to take a reading test after completing about an hour-and-a-half of homework because this will mimic the amount of time you will have spent taking the ACT by the time you get to the reading test.

Checking Your Answers

If you wish to double-check your work, you can do so either at the end of each passage while the content is still fresh in your memory or after finishing the complete reading test. Mark questions that you are unsure about with a symbol such as a question mark. If you're taking the test online, you can use the bookmark tool to mark questions you'd like to come back to. When checking your work, be sure to consider the context of the passage as a whole, not just the referenced lines or most relevant paragraph. If you decide to change an answer, try to consciously recognize the reason for the change by articulating it to yourself. For example, "I am changing my answer to B because I realize now that I misinterpreted the line of text to be referring to sand dollars when it is really referring to certain types of seashell." Using this process to slow down and articulate your thought process will help you be mindful as you double-check your answers.

Taking a Diagnostic Practice Test

Before taking a diagnostic reading test, read [chapter 2](#), which offers suggestions about how to approach the reading test, and decide which approach you will practice. If you divide your time evenly among the passages, each passage set should take 10 minutes from start to finish. You need to determine how much of that time you should dedicate to reading each passage and how much time to devote to answering the questions. Most students should first begin by spending three to four minutes reading each passage and the remaining time answering the questions. If that approach does not work well, try to spend about five to six minutes reading and the remaining time answering the questions. Being able to cross out answer choices, underline, and star information can help you process the passages and questions. In the online version of the test, you will have a highlighting tool.

Using This Guide

This guide begins with a review of a variety of approaches that can be used to tackle the ACT reading test passages. Next comes a description of a number of reading skills you will need for success on the ACT reading test and an overview of several question types that appear across different passages. These questions are accompanied by the relevant excerpts from the passages, and some excerpts are accompanied by explanatory notes that paraphrase the content of the passage. You may wish to hold off on reading the explanatory notes until you have attempted the question, using only the content from the passage itself.

Note: Entire passages are not always reproduced. Ellipses (...) indicate that a paragraph has been omitted. In order to provide information about which portion of the passage has been reproduced, paragraph numbers have been included in brackets as follows. Paragraph numbers will not appear on the actual exam. Line reference numbers will be included for every fifth line of text in this guide and on the paper-based exam.

Sample Excerpt

LITERARY NARRATIVE: This passage is adapted from “My Life with a Field Guide” by Diana Kappel-Smith (©2002 by Phi Beta Kappa Society).

[5]

... In the thin summer shadow of the tree, quivering, like a veil, the book was revealed, and I reached for it. A FIELD GUIDE TO WILD FLOWERS—PETERSON & McKENNY, its cover said. Its backside was ruled like a measuring tape, its inside was full of drawings of flowers. By the end of that week I had my own copy. I have it still.

...

[8]

I had already figured out the business of the book’s colored tabs. I turned in an authoritative way to the Yellow part and began to flip through. By the time the last of my friends had disappeared up the trail, I’d arrived at a page where things looked right. Five petals? Yes. Pinnate leaves? Whatever. Buttercup? There are, amazingly, *eleven* buttercups. Who would have thought? However hard I tried to make it so, my item was not one of them. Next page. Aha! this looked more like it. Bushy cinquefoil? Nope, leaves not *quiiiite* right, are they? As the gnats descended, I noticed that there were six more pages ahead, each packed with five-petaled yellow flowers—St. John’s wort loosestrifes, puccoons.

[9]

Why I persisted in carrying it around and consulting its crowded pages at every opportunity, I have no

idea. The book was stubborn; well, I was stubborn, too; 55 that was part of it.

The remainder of this guide covers the content and form of the various passage types: literary narrative, humanities, social science, and natural science. Seeing questions and passages grouped by genre should help you gain a deeper understanding of how to navigate the process of reading the different passage types. As you complete practice questions, keep track of your mistakes and reflect on the processes you used to arrive at your answers. Try to develop an awareness of the types of reading passages and questions that you have trouble with so you can budget your time appropriately to maximize your score.

Chapter 2: General Reading Skills

Skimming

Skimming is essentially speed reading with a low level of comprehension. Use the structured nature of the humanities, social science, and natural science passages to help you vary your reading speed. For example, the first and last sentences of each paragraph are typically the most important, and the introduction and conclusion of each passage typically give the broadest framework for the content of the passage as a whole. Therefore, you can gather a great deal of information by focusing on comprehending these parts of the passage.

You might be surprised by how much you can understand from looking only at these portions of the text. The following exercise will deconstruct a text in this way for you.

Look at the following key sentences from a passage adapted from *Biomimicry: Innovation Inspired by Nature* by Janine M. Benyus (©1997 by Janine M. Benyus). Read through all of them, and then reflect on the main point or points that the collection of sentences conveys. Do you think you have an understanding of what the passage as a whole will be about just based on these sentences?

INFORMATIONAL: This passage is adapted from *Biomimicry: Innovation Inspired by Nature* by Janine M. Benyus (©1997 by Janine M. Benyus).

Introduction First Sentence

If anybody's growing biomass, it's us. To keep our system from collapsing on itself, industrial ecologists are attempting to build a "no-waste economy."

Introduction Last Sentence

The first examples of this no-waste economy are collections of companies clustered in an ecopark and connected in a food chain, with each firm's waste going next door to become the other firm's raw material or fuel.

Topic Sentence of the First Body Paragraph

In Denmark, the town of Kalundborg has the world's most elaborate prototype of an ecopark.

Topic Sentence of the Second Body Paragraph

Waste steam from the power company is used by Novo Nordisk to heat the fermentation tanks that produce insulin and enzymes.

Topic Sentence of the Third Body Paragraph

Meanwhile, back at the Statoil Refinery, waste gas that used to go up a smokestack is now purified.

Topic Sentence of the Fourth Body Paragraph

Although Kalundborg is a cozy co-location, industries need not be geographically close to operate in a food

web as long as they are connected by a mutual desire to use waste.

Topic Sentence of the Fifth Body Paragraph

So far, we've talked about recycling within a circle of companies.

Topic Sentence of the Sixth Body Paragraph

Traditionally, manufacturers haven't had to worry about what happens to a product after it leaves their gates.

First Sentence of the Conclusion

When the onus shifts in this way, it's suddenly in the company's best interest to design a product that will either last a long time or come apart easily for recycling or reuse.

Last Sentence of the Conclusion

Today's bags, which have nine thin layers made of seven different materials, will no doubt be replaced by one material that can preserve freshness and can easily be remade into a new bag.

Synthesis of the Main Idea Based on the Previous Information

Companies are beginning to take responsibility for using materials in a sustainable way that considers the life cycle of the materials used to produce goods.

INFORMATIONAL: This passage is adapted from *Biomimicry: Innovation Inspired by Nature* by Janine M. Benyus (©1997 by Janine M. Benyus).

If anybody's growing biomass, it's us. To keep our system from collapsing on itself, industrial ecologists are attempting to build a "no-waste economy." Instead of a linear production system, which binges on virgin raw materials and spews out unusable waste, they envision

a web of closed loops in which a minimum of raw materials comes in the door, and very little waste escapes. The first examples of this no-waste economy are collections of companies clustered in an eco-park and connected in a food chain, with each firm's waste going next door to become the other firm's raw material or fuel.

In Denmark, the town of Kalundborg has the world's most elaborate prototype of an eco-park. Fourteen companies are co-located, and all of them are linked, dependent on one another for resources or energy. The Asnaesverket Power Company pipes some of its waste steam to power the engines of two companies: the Statoil Refinery and Novo Nordisk (a pharmaceutical plant). Another pipeline delivers the remaining waste steam to heat thirty-five hundred homes in the town, eliminating the need for oil furnaces. The power plant also delivers its cooling water, now toasty warm, to fifty-seven ponds' worth of fish. The fish revel in the warm water, and the fish farm produces 150 tons of sea trout and turbot each year.

Waste steam from the power company is used by Novo Nordisk to heat the fermentation tanks that

produce

insulin and enzymes. This process in turn creates 30 700,000 tons of nitrogen-rich slurry a year, which used

to be dumped into the fjord. Now, Novo bequeaths it free to nearby farmers—a pipeline delivers the fertilizer to the growing plants, which are in turn harvested to feed the bacteria in the fermentation tanks.

35 Meanwhile, back at the Statoil Refinery, waste gas that used to go up a smokestack is now purified. Some is used internally as fuel, some is piped to the power company, and the rest goes to Gyproc, the wallboard market next door.

The sulfur squeezed from the gas 40 during purification is loaded onto trucks and sent to Kemira, a company that produces sulfuric acid. The power company also squeezes sulfur from its emissions, but converts most of it to calcium sulfate (industrial gypsum), which it sells to Gyproc for wallboard.

45 Although Kalundborg is a cozy co-location, industries need not be geographically close to operate in a food web as long as they are connected by a mutual desire to use waste. Already, some companies are designing their processes so that any waste that falls on 50 the production-room floor is valuable and can be used

by someone else. In this game of “designed offal,” a process with lots of waste, as long as it’s “wanted waste,” may be better than one with a small amount of waste that must be landfilled or burned. As author 55 Daniel Chiras says, more companies are recognizing that “technologies that produce by-products society cannot absorb are essentially failed technologies.”

So far, we’ve talked about recycling within a circle of companies. But what happens when a product

60 leaves the manufacturer and passes to the consumer and finally to the trash can? Right now, a product visits one of two fates at the end of its useful life. It can be buried in a landfill or incinerated, or it can be recaptured through recycling or reuse.

65 Traditionally, manufacturers haven't had to worry about what happens to a product after it leaves their gates. But that is starting to change, thanks to laws now in the wings in Europe (and headed for the United States) that will require companies to take back their 70 durable goods such as refrigerators, washers, and cars at the end of their useful lives. In Germany, the take-back laws start with the initial sale. Companies must take back all their packaging or hire middlemen to do the recycling. Take-back laws mean that manufacturers 75 who have been saying, "This product can be recycled," must now say, "We recycle our products and packaging."

When the onus shifts in this way, it's suddenly in the company's best interest to design a product that will 80 either last a long time or come apart easily for recycling_ or reuse. Refrigerators and cars will be assembled using easy-open snaps instead of glued-together joints, and for recyclability, each part will be made of one material instead of twenty. Even simple things, like the snack 85 bags for potato chips, will be streamlined. Today's bags, which have nine thin layers made of seven different materials, will no doubt be replaced by one material

that can preserve freshness and can easily be remade into a new bag.

Now that you have read through the whole passage, how do the main point or points compare to the ones you identified after reading only the deconstructed version of the passage? How accurately were you able to gauge what the passage is about?

Based on your experience with the previous exercise, you should be able to identify the correct answer to the following “big-picture” question.

It can reasonably be inferred that the author’s proposed solution to what she sees as the problem of an increasing amount of biomass is to:

- A. change the process by which manufacturers produce their products.
- B. make consumers responsible for recycling the products they buy.
- C. encourage traditional businesses to compete with new, innovative businesses.
- D. encourage companies that produce similar products to cluster together in ecoparks.

The best answer is A because the author says, “To keep our system from collapsing on itself ” due to increasing amounts of biomass, “industrial ecologists are attempting to build a ‘no-waste economy’ ” (lines 1-3), which she describes as “a web of closed loops in which a minimum of raw materials comes in the door, and very little waste escapes” (lines 6-8).

The best answer is NOT:

- B. because through her description in the seventh and last paragraphs (lines 65–89) of take-back laws and their impact, the author suggests that manufacturers, not consumers, should be held responsible for recycling many kinds of products.
- C. because the notion of having traditional businesses compete with new, innovative businesses doesn't directly come up in the passage. Instead, the author focuses on changes that can take place in all kinds of companies, traditional and new.
- D. because while the four Kalundborg companies described in the second, third, and fourth paragraphs (lines 13–44) are co-located in an ecopark, the author says that “industries need not be geographically close to operate in a food web as long as they are connected by a mutual desire to use waste” (lines 45–48). Also, the four Kalundborg companies aren't producing similar products.

Scanning for the Conclusion or Main Idea

Often questions ask about the main idea of a passage. This information can sometimes be found in the introduction or conclusion. Taking note of the following transition words can help you identify times when a passage is drawing a conclusion, establishing a cause and effect relationship, or emphasizing a point. Sentences that synthesize information or draw conclusions can be especially helpful when it comes to determining the main idea of a passage.

Cause and Effect	Emphasis	Conclusion
-------------------------	-----------------	-------------------

Cause and Effect	Emphasis	Conclusion
accordingly	clearly	in conclusion
as a result	especially	in summary
as such	in fact	in total
because	in particular	all things considered
consequently	indeed	
ergo	however	
for	nevertheless	
hence	notably	
thus	regardless	
therefore	still	
since	though	
so		

Transitions That Signal Repetition

Some transition words essentially indicate that information will be repeated. Writers often repeat ideas for emphasis or elaboration. For example, a writer complaining about the lack of vegetarian options at a college dining hall might write the following.

Example 1

My dining hall rarely offers meatless entrées; **in fact**, last week, each entrée contained beef or poultry.

Notice that the second sentence is essentially making the same point as the first sentence does. The second sentence

is simply more specific. The phrase “in fact” signals that the second sentence will reiterate the first sentence, usually in more specific terms. Sometimes the sentence that follows “in fact” will reiterate the previous idea in broader or more emphatic terms. Here are several examples of the use of these kinds of transition phrases in context. When you encounter transition words that signal emphasis or repetition, you can speed through the sentences that follow, knowing that they will not be adding any information that differs substantially from the content in the sentence directly prior to the transition phrase.

Example 2

“For extended human activities on the Moon or Mars, you must have self-sustaining biological systems, systems that are regenerative,” Dixon says. **In other words**, green plants. “They give you oxygen, consume your carbon dioxide, and recycle your water.”

Example 3

As we move from small to large animals, from mice to elephants or small lizards to Komodo dragons, brain size increases, but not so fast as body size. **In other words**, bodies grow faster than brains, and large animals have low ratios of brain weight to body weight. **In fact**, brains grow only about two-thirds as fast as bodies. Since we have no reason to believe that large animals are consistently stupider than their smaller relatives, we must conclude that large animals require relatively less brain to do as well as smaller animals.

The best answer is NOT:

F because it contradicts the idea that metallurgy is both an art and a science, which the author puts forth in the fifth paragraph (lines 38–50).

G because although the author states that metallurgy is difficult, he does not do so to suggest that this is the reason why metallurgy is not considered a science. Lines 43–45: “But the reason for this empiricism is not that the science of metallurgy is trivial; it is because it is so difficult.”

J because it directly contradicts a statement by the author. Lines 43–45: “But the reason for this empiricism is not that the science of metallurgy is trivial; it is because it is so difficult.”

Question 33. The best answer is A because in comparing the behavior of materials to the study of the social sciences, the passage suggests that both require the study of a wide range of scales. Lines 56–61: “Science has trouble dealing with such a span of scales. One might regard this difficulty as akin to that in the social sciences, where social behaviour is governed by how individuals behave but also how we interact on the scale of families and neighborhoods, within entire cities, and at a national level.”

The best answer is NOT:

B because the passage does not suggest that the study of the social sciences is based on trial-and-error experimentation.

C because the passage explains that the study of the social sciences involves the study of people (lines 57–61). The passage does not suggest that the study of social sciences involves the examination of individual atoms.

D because the passage does not indicate that either field of study produces results that must be interpreted by both scientist and artists.

Question 34. The best answer is F because the paragraph as a whole describes the way various defects in the crystal structure of a metal influence its behavior, as introduced in the first sentence of the paragraph. Lines 62–64: “The mechanical properties of metals depend on how flaws in the crystal structure, called defects, move and interact.”

The best answer is NOT:

G because although the paragraph notes dislocations as the most common fault (lines 66–67), this is a subordinate detail in the paragraph and not the main idea.

H because the paragraph does not describe how increasing a metal’s grain size would modify its behavior.

J because although the paragraph mentions that grains may divide into crystallite mosaics, (lines 72–74), this is a subordinate detail in the paragraph and not the main idea.

Question 35. The best answer is C because *stretched* can mean *extended*, and this meaning is contextually appropriate in the description of the wide range of Cotterill's expertise. Lines 45-48: "According to Rodney Cotterill, a remarkable British physicist whose expertise stretched from the sciences of materials to that of the brain."

The best answer is NOT:

A because although *stretched* can mean *strained*, it is not contextually appropriate to say that "Cotterill's expertise strained from the sciences of materials to that of the brain."

B because although *stretched* can mean *exaggerated*, it is not contextually appropriate to say that "Cotterill's expertise exaggerated from the sciences of materials to that of the brain."

D because although *stretched* can mean *amplified*, it is not contextually appropriate to say that "Cotterill's expertise amplified from the sciences of materials to that of the brain."

Question 36. The best answer is J because the passage directly states that reducing the size of a metal's grains can make the metal harder. Lines 74-77: "The arrest of dislocations at grain edges means that metals may be made harder by reducing the size of their grains, a useful trick for modifying their mechanical behaviour."

The best answer is NOT:

F because the passage does not state that reducing the size of a metal's grains can make the metal more rust-resistant.

G because the passage does not state that reducing the size of a metal's grains can make the metal more brittle.

H because the passage does not state that reducing the size of a metal's grain can make the metal finer.

NOTES