

# ACT Summer Study Group

## Format and timing:

We'll meet each Wednesday of June and July on Zoom at 11 am Eastern (8 am Pacific). The Zoom meetings will last for approximately 1 hour. Our screen and the portion up until the Q&A at the end will be recorded, so you can participate asynchronously if needed.

## Book:

We'll be using The Official ACT Prep Guide 2025-2026 by Wiley. You'll need to purchase this book to participate in the study group.

## Time commitment:

For best results, attend each Wednesday Zoom session and do all of the assigned pages each week. We recommend setting aside approximately **1 hour each day** for studying and working practice problems during the 9-week session. For the practice exams, you'll need 3 consecutive hours.

We understand that summer can be a busy time for many families. If you have travel, work, or other commitments and cannot make all of the Wednesday classes, that's okay. But not studying outside of class is *NOT* okay! This accountability group is based on the expectation that each student will study, take practice tests, and share their questions and experiences to help encourage others in the group.

We expect participating students to find at least 5 hours of study time each week.

## Some thoughts on standardized tests:

The ACT is, unfortunately, one of the gatekeeping realities of our education system. It doesn't measure intelligence or predict success in college or beyond— *what it actually measures is how good you are at taking the ACT.*

In some sense, this is unfair because important outcomes like college acceptance and scholarship money are directly tied to ACT scores.

But in a way, this is also good news because if test taking is a skill then – just like any other skill – it can be improved through practice.

In our study sessions, we'll discuss test-taking strategies and tips for pacing and process of elimination. We'll talk about managing test anxiety and some of the other learnable techniques that can improve your test-taking skills.

But the real magic will happen during your independent study sessions. The more you prepare and practice, the stronger your test-taking skills will become!

## 9-Week Program Overview

- Week 1: Kickoff & Orientation
- Week 2: Diagnostic Review
- Week 3: English Section
- Week 4: Mathematics, Part 1
- Week 5: Mathematics, Part 2
- Week 6: Reading Section
- Week 7: Science Section, Part 1
- Week 8: Science Section, Part 2
- Week 9: Full Practice Test Review & Wrap-Up

# Orientation & Goal Setting

## The ACT and Test Taking

In this lesson we'll introduce ourselves, go over the test in general, and discuss goal setting and the importance of practice. Be ready to make a plan for when and where you will study. Mental focus is like a muscle: the more you use it, the stronger it gets!

### ACT Quick Facts

<b>Sections</b>	English, Math, Reading, Science (+ optional Writing)
<b>Total Time</b>	~3 hours (without Writing)
<b>Score Range</b>	1–36 per section; composite is the average of all 4
<b>Questions</b>	171 multiple-choice questions total
<b>Calculator</b>	Allowed on the entire Math section

### Tips for This Week

- Find a quiet place, free from distractions. Treat it like the real test.
- Use a timer. Each section has a strict time limit, which you can find on page 4 of the ACT Prep Guide or page 10 of this outline. Timing yourself is VERY important. Don't skip it or give yourself extra time on a section!
- Use only allowed materials: pencils, approved calculator, and the test booklet.
- When in doubt, guess! There is no penalty for wrong answers on the ACT.

### Homework

Complete Practice Test 1 in the Official ACT Prep Guide under timed, test-like conditions. Treat it as if it were the real test. Use [a sample answer sheet](#) like on page 40.

Go over the test section by sections and score it. Don't be discouraged if the result is lower than what you hoped for! Remember, the best thing it measures is how good you are at taking the ACT, and this will improve with practice.

# Diagnostic Review and Test Taking Tips

## Reviewing Practice Test 1

The purpose of Practice Test 1 is to get a benchmark of approximately where your test-taking skills are. In today's lesson we'll develop a plan to level up those skills. Make sure you already scored your test so you can strategize on how to improve.

## How to Score Your Test

<b>Step 1</b>	Count the number of correct answers in each section (raw score).
<b>Step 2</b>	Use the score conversion chart in the prep guide to get a scaled score (1–36) for each section.
<b>Step 3</b>	Average the four scaled scores to find your composite score.

## Understanding Your Results

- Which section was your strongest? Which needs the most work?
- Were there question types you consistently got wrong?
- Did you run out of time on any section?
- Were there careless mistakes you can fix with better habits?

## Test-taking Tips to Practice

- Pacing
- Unpack *why* you got a question wrong
- Skip hard questions and return to them
- Eliminate obviously wrong answers
- Write out your work
- Attitude is powerful! Practice a mindset that will help frame challenges as puzzles rather than threats

## Score Tracking

Record your results across all practice tests. Seeing your progress over time is motivating and helps identify trends.

<b>Track</b>	Scaled score per section + composite score for each test
<b>Also note</b>	Number of questions skipped or left blank
<b>Test conditions</b>	Before the practice test: did you get a full night of sleep? Did you eat breakfast? Record the test-taking conditions: Were you able to do a full uninterrupted test? Did you run out of time on any sections? Did you experience any interruptions?

## Tips for This Week

- Focus on understanding **WHY** you got a question wrong, not just the correct answer.
- Look for patterns in simple mistakes. Identifying careless errors and fixing them is the easiest way to boost your score.
- Don't panic about a low starting score. That's exactly what this program is for!

## Homework

Complete the English practice questions from Practice Test 2 in the Official ACT Prep Guide. Score yourself and then carefully go over the solutions in the explanatory answers. Bring any questions to next week's meeting.

# English Section

## Exploring the English Section

The purpose of this section is to measure your ability to revise and edit writing. It will look at specifics of punctuation and sentence structure as well as more big-picture things like style and tone.

### Section Overview

<b>Questions</b>	50 multiple-choice
<b>Time</b>	35 minutes
<b>Format</b>	6-7 passages or essays (each with between 5 to 10 questions). The number of and length of essays varies between exams.
<b>Skills Tested</b>	Usage/Mechanics and Rhetorical Skills

### Usage & Mechanics — Key Rules

- Punctuation: commas, apostrophes, semicolons, colons, dashes
- Grammar: subject-verb agreement, pronoun agreement, verb tense
- Sentence structure: fragments, run-ons, misplaced modifiers

### Rhetorical Skills — What to Know

- Strategy: Does the addition/deletion serve the passage's purpose?
- Organization: Is this sentence/paragraph in the right place?
- Style: Is the writing clear, concise, and appropriate in tone?

### Common Traps

- Longer isn't better. The ACT often rewards the most concise correct answer.
- "NO CHANGE" is a valid answer! Don't be afraid to select this option.
- Read the full sentence (not just the underlined part) before choosing.
- For rhetorical questions, it can help to re-read the surrounding paragraph for context.

### Pacing Strategy

With 35 minutes for 50 questions, you have about 42 seconds per question. Aim to finish each passage in about 7-8 minutes to have a couple minutes to revisit flagged questions.

#### Tips for This Week

- Read each passage for flow. It helps catch awkward phrasing that looks correct in isolation.
- For "DELETE the underlined portion" questions, try removing it. If the sentence still makes sense, deletion is often right.
- If two answers seem identical in meaning, choose the shorter one.
- Don't overthink grammar rules. If it sounds natural and correct, trust your ear.

#### Homework

Complete the Math practice questions from Practice Test 2 in the Official ACT Prep Guide. Score yourself and then carefully go over the solutions in the explanatory answers. Bring questions to next week's meeting.

Week 4 | ACT Study Group

## Mathematics, Part 1

### Section Overview

Questions	45 multiple-choice
Time	50 minutes
Calculator	Permitted for all questions
Format	Questions increase in difficulty as test progresses

### Topics Covered in Part 1

- Pre-Algebra: fractions, decimals, percentages, ratios, averages, basic probability
- Elementary Algebra: solving equations, inequalities, exponents, square roots
- Intermediate Algebra: quadratics, systems of equations, functions, matrices
- Coordinate Geometry: slope, distance, midpoint, graphing lines and parabolas

### Calculator Strategy

- Use your calculator for arithmetic, but set up the problem first by hand.
- Don't rely on the calculator for problems that are faster to solve mentally.
- Know your calculator's functions: fractions, exponents, graphing if applicable.

### Pacing Strategy

With 50 minutes for 45 questions, you have roughly 1 minute per question. Early questions should take less time, so save your extra time for the harder questions at the end.

Questions 1–15	~30 seconds each (easy–medium)
Questions 16–30	~60 seconds each (medium)
Questions 31–45	~90 seconds each (hard)

### Tips for This Week

- Skip and come back! If you feel like you're getting stuck, move on. Never spend more than 2 minutes on one problem.
- You can plug in the answer choices and see if that helps.
- Draw pictures for geometry problems. Even rough sketches help.
- Memorize key formulas: area, perimeter, slope, Pythagorean theorem.

### Homework

Continue reviewing Practice Test 2 in the Official ACT Prep Guide or find a new math test to try. We planned to save Practice Tests 3 and 4 to do later on. You can print [a PDF of an online test](#). If you get stuck on a question, you can bring it to class next week.

## Mathematics, Part 2

### Building on Last Week

This week we go deeper into the more advanced math topics on the ACT. We'll also save time to work through the trickier question types that appeared in your homework. Come ready to share the problems that stumped you!

### Topics Covered in Part 2

- Plane Geometry: triangles, circles, polygons, area, volume, angles
- Trigonometry: sin, cos, tan; SOHCAHTOA; basic trig equations
- Advanced topics: logarithms, complex numbers, sequences (appear infrequently)

### Geometry Essentials

<b>Triangles</b>	Angles sum to $180^\circ$ ; area = $\frac{1}{2} \times \text{base} \times \text{height}$
<b>Circles</b>	Area = $\pi r^2$ ; circumference = $2\pi r$
<b>Special triangles</b>	30-60-90 and 45-45-90 ratios appear frequently
<b>3D shapes</b>	Know volume formulas for cylinders, cones, and spheres

### Trigonometry Essentials

- SOHCAHTOA: Sin = Opposite/Hypotenuse, Cos = Adjacent/Hypotenuse, Tan = Opposite/Adjacent
- Know when to use the unit circle vs. a calculator for trig values.
- Trig problems on the ACT are usually straightforward — don't over-complicate them.

### Common Traps

- Forgetting to square the radius ( $r^2$ ) vs. the diameter in circle problems.
- Misreading the question: "perimeter" vs. "area", "radius" vs. "diameter".
- Assuming a figure is drawn to scale when it may not be.

### Tips for This Week

- If you see a geometry figure with no measurements labeled, add the labels to the figure. Work with what you know.
- For trig, label all triangle sides BEFORE applying a formula.
- When stuck, try working backward from the answer choices.
- Don't skip advanced problems. Even a partially correct setup can lead to the answer.

### Homework

Complete the Reading Section from Practice Test 2 in the Official ACT Prep Guide. Score yourself and then carefully go over the solutions in the explanatory answers. Note how long each passage takes you, and bring tricky questions to next week's class.

## Reading Section

### Are you a non-reader, a casual reader, or an avid reader?

One of the BEST things you can do to prepare for this section is to read books. Any books you'd like! Reading builds your vocabulary faster than pretty much anything else and the benefits of reading extend far beyond a higher score on a test. Reading builds empathy and emotional intelligence, reduces stress, and improves your writing too.

### Section Overview

<b>Questions</b>	36 multiple-choice
<b>Time</b>	40 minutes
<b>Passages</b>	4 passages (~850 words each); 9 questions per passage
<b>Passage Types</b>	Literary Narrative, Social Science, Humanities, Natural Science

### The Four Passage Types

- Literary Narrative: fiction or memoir — pay attention to character and tone.
- Social Science: essays on history, economics, sociology, or political science.
- Humanities: essays on arts, music, architecture, or literature.
- Natural Science: essays on biology, chemistry, physics, or earth science.

### Reading Strategies

- Read the passage first, or read the questions first? Try both approaches and see what works for you.
- Write on the test as you go: underline main ideas, circle names, put brackets around transitions.
- Pay attention to the author's tone and purpose.
- For paired passages: understand each author's viewpoint before comparing.

### Question Types

<b>Main Idea</b>	What is the passage primarily about?
<b>Detail</b>	Find the answer directly in the text. Go back and look.
<b>Inference</b>	What does the author imply? Look for clues, not guesses.
<b>Vocabulary</b>	<i>Use context.</i> The ACT tests how words work in context.
<b>Function</b>	Why did the author include this paragraph or detail?

### Tips for This Week

- Spend about 8–9 minutes per passage (reading + questions) to finish on time.
- Return to the text. Don't just read it once and answer all the questions! Go back and re-read relevant portions.
- Inference questions can't go too far. The answer must be grounded in or connected to the text.

### Homework

Complete the Science section of the Practice Test 2 in the Official ACT Prep Guide. Score yourself and then carefully go over the solutions in the explanatory answers. Notice which passage type (Data Representation, Research Summaries, or Conflicting Viewpoints) is hardest for you.

## Science Section

### Trivia vs Analysis

This section is NOT testing you on science trivia. While it helps to be familiar with the topics, what this section is really looking at is your ability to READ and INTERPRET scientific information: graphs, tables, and experiments. *Everything you need to answer the questions can be found in the passage.*

### Section Overview

<b>Questions</b>	40 multiple-choice
<b>Time</b>	40 minutes
<b>Passages</b>	6–7 passages; 5–7 questions each
<b>Passage Types</b>	Data Representation, Research Summaries, Conflicting Viewpoints

### The Three Passage Types

- Data Representation: charts, graphs, and tables. Focus on axes, units, and trends.
- Research Summaries: 2–3 related experiments. Understand what changed and what was measured.
- Conflicting Viewpoints: two scientists with different explanations. Understand each view, then compare.

### Reading Charts & Graphs

- Always read the axis labels and units before looking at the data.
- Look for trends: does the value increase, decrease, or stay the same?
- For tables with multiple variables, focus on what the question is asking about.

#### Tips for This Week

- Start with Data Representation passages. They tend to be the quickest.
- For Conflicting Viewpoints, read all the viewpoints before answering any questions.
- If a question uses outside knowledge you don't have, re-read the passage — the answer is there.
- Don't get bogged down in science jargon. Focus on relationships between variables.

#### Homework

Complete Practice Test 3 in the Official ACT Prep Guide under timed, test-like conditions. This is your second full timed test. Pay attention to how the science section feels this time (doing it after the English, Math, and Reading sections) versus last week.

## Science Section - in context

### Sprint vs Marathon

Mental endurance plays a large role in standardized tests like the ACT. The science section is the last portion, and by the time you get to it, your brain is fatigued! This week, we're going to do the science section again, but in *real test conditions*. Set aside a time and space with no interruptions or distractions. Be sure to time yourself on each section! As soon as the timer on that section finishes, go to the next.

<b>English</b>	35 minutes
<b>Math</b>	50 minutes
<b>Break</b>	10 minute break - this is mandatory. Don't skip it! You can eat a snack, get a drink, walk around, and/or go use the bathroom. Do anything you'd like, but do NOT study or read. Give your brain a change of pace.
<b>Reading</b>	40 minutes
<b>Science</b>	40 minutes
<b>Writing (optional)</b>	40 minutes <i>We're not focusing on the optional writing portion of the exam, but if you wanted to practice it, then it would go here.</i>

### Evaluate your Results

- Did the science section feel different this week versus last week? The tips on graph reading and data interpretation from last week should have helped – but doing the science section after the other sections is much more challenging!
- It's normal to feel mental fatigue by the time you get to the science section.
- Taking the exam is only part of the work. Be sure to grade your results and look back through each section carefully. Figure out *why* you missed each question. If it's a lack of knowledge, identify specific things you can study. If it's test-taking errors, identify what strategy might help (such as crossing off obviously wrong answers first to avoid overthinking a question, or if it's pacing, make sure to move onto a new question if stuck)

### Tips for This Week

- Recreate a test environment as much as possible: a quiet room, only the materials you'll have during an exam. A timer. If possible, have a friend or family member keep track of time and prompt you to go to the next sections.

### Homework

Evaluate your progress by comparing Practice Test 1 and Practice Test 3. Hopefully, you see some improvement between the two tests in the score or in how you felt while testing or both. Design a personalized study plan for areas you'd like to improve. When ready, complete Practice Test 4 in the Official ACT Prep Guide under timed, test-like conditions. You could choose to do the 4th practice test before our final meeting. You could also choose to focus on studying and preparing more and do the 4th practice test at a later date.

## Full Practice Test Review & Wrap-Up

### Reviewing Practice Test 3 and/or 4

Today we'll discuss how to evaluate progress and form custom study plans. We'll also talk about specific test-taking strategies for test day. Simple things like getting enough sleep and eating breakfast make a significant difference!

### Measuring Your Progress

<b>Compare scores</b>	Check each section and your composite scores on the exams you've taken so far
<b>Identify wins</b>	Which sections improved the most?
<b>Remaining gaps</b>	Are there specific question types still giving you trouble?
<b>Error patterns</b>	Are mistakes careless, conceptual, or time-related?

### Test-Day Checklist

- Bring: valid photo ID, admission ticket, approved calculator + extra batteries, pencils (#2), a watch (no smart watches allowed), snacks for breaks.
- Arrive early. Plan to be there at least 30 minutes before the start time.
- Eat a solid breakfast. Avoid anything that will make you sluggish.
- Get a full night of sleep the night before (7–9 hours).
- Wear layers. Testing rooms might be warm or cold. If you can remove or put on a jacket to stay comfortable, that can be a big help.

### Last-Minute Mindset Tips

- You have already done the preparation. Trust yourself!
- If you hit a hard question, skip it and come back. Don't spiral.
- Answer every question. There is no penalty for guessing on the ACT.

### Keep Going on Your Own

Your purchase of The Official ACT Prep Guide book also includes access to 4 full-length digital exams. You can use these to continue practicing.

#### **We're proud of you**

- Celebrate how much you've learned. 9 weeks of consistent work is a real achievement!