YOCKET

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# ACT Practice Paper 3

English | Maths | Reading | Science

Section-wise answer keys with explanations

## About This Paper

This is a Yocket original practice paper that follows the structure of the ACT. It contains 50 questions across four sections. Every passage and question is written by Yocket, so you can attempt it as a timed mock.

| Section | Questions | Suggested time | What it tests |
|---|---|---|---|
| 1. English | 15 | 11 minutes | Grammar, punctuation, sentence structure, rhetorical skills |
| 2. Maths | 15 | 17 minutes | Algebra, geometry, statistics, probability, trigonometry |
| 3. Reading | 10 | 11 minutes | Main idea, detail, inference, vocabulary in context |
| 4. Science | 10 | 10 minutes | Reading tables, spotting variables, drawing conclusions |

Suggested times follow the per-question pace of the full ACT sections, scaled down to this shorter paper.

## How to Use It

- **Set a timer:** attempt each section in one sitting and stop when the suggested time ends.
- **Work on paper:** circle your answers, and keep the answer key closed until you finish the section.
- **Review every miss:** the key explains the reasoning, so you learn the method and not only the answer.
- **Treat your score as a diagnostic:** a short paper cannot produce an official ACT scale score, so use it to find your weak sections.

Section 1

# English

15 questions | Suggested time: 11 minutes | Choose the best answer for each underlined portion or question. Choose NO CHANGE if the underlined portion is already correct.

## Passage I: Community Gardens

Across many cities, empty plots of land are turning into community gardens. Neighbours [1]shares tools, seeds, and advice, and each family receives a small plot of its own. The harvest matters[2], but organisers say the biggest change is social: people who once passed one another in silence now trade recipes over the fence.

Starting a garden [3]demand patience, however. Soil on abandoned lots is often contaminated, so volunteers must test it before planting. Many gardens therefore use raised beds filled with clean soil. [4]This method costs more at first, but it keeps vegetables safe to eat. [5]

**1.**

- **A.** NO CHANGE
- **B.** is sharing
- **C.** share
- **D.** has shared

**2.**

- **A.** NO CHANGE
- **B.** , so
- **C.** , because
- **D.** , or

**3.**

- **A.** NO CHANGE
- **B.** have demanded
- **C.** demands
- **D.** were demanding

**4.**

- **A.** NO CHANGE
- **B.** This method costs more at first but, it keeps vegetables safe to eat.
- **C.** This method, costs more at first, but it keeps vegetables safe to eat.
- **D.** This method costs more, at first but it keeps vegetables safe to eat.

**5.** The writer wants to end with a sentence that links the practical and the social value of the gardens. Which choice does this best?

- **A.** Safe soil gives each gardener a harvest to share, and the shared work gives neighbours a reason to talk.
- **B.** Raised beds are usually made from timber or recycled bricks.
- **C.** Some cities have more empty plots than others.
- **D.** Contaminated soil can be tested with simple kits.

## Passage II: The Missing Umbrella

Tomas stood at the bus stop, rain running down his collar, when he **[11]**realises that his umbrella was still on the earlier bus. A woman named Ines held a large red umbrella**[12]**, and offered him a place beneath it. Tomas thanked her quickly. **[13]**

Ines, **[14]**who's umbrella had sheltered them both, laughed kindly as the next bus arrived. The driver had found the missing umbrella on a seat and hung it on the rail. **[15]**

**6.**

- **A.** NO CHANGE
- **B.** will realise
- **C.** realised
- **D.** has realised

**7.**

- **A.** NO CHANGE
- **B.** : and offered
- **C.** and offered
- **D.** ; and offered

**8.** Which choice best shows Tomas's embarrassment?

- **A.** The woman's umbrella had a wooden handle.
- **B.** Rain is common in the city in autumn.
- **C.** His face felt warm, and he stared at his shoes while the bus approached.
- **D.** The bus was due in four minutes.

**9.**

- **A.** NO CHANGE
- **B.** which
- **C.** who
- **D.** whose

**10.** Which choice best concludes the passage by returning to the rain from the opening?

- **A.** By the time the bus pulled away, the rain had thinned to a drizzle, and Tomas realised he was smiling.
- **B.** The bus route runs from the station to the school.
- **C.** Many people forget umbrellas on public transport.
- **D.** Ines lives two streets from the bus stop.

## Passage III: Podcasts in the Classroom

Teachers are increasingly **[21]**using podcasts for the purpose of teaching subjects as varied as history, chemistry, and creative writing. Audio lessons suit students with busy timetables**[22]**, they can listen on the bus, at the gym, or while cooking.

Research on listening is mixed. Some studies find that students remember spoken explanations **[23]**as good as written ones, while others find that attention drifts without visual cues. Teachers **[24]**therefore often pair a podcast with a short written task. **[25]**

**11.**

**A.** NO CHANGE
**B.** making use of podcasts so as to be teaching
**C.** using podcasts to teach
**D.** using podcasts for the purpose of the teaching of

**12.**

**A.** NO CHANGE
**B.** , they can,
**C.** ; because they can
**D.** because they can

**13.**

**A.** NO CHANGE
**B.** as good like
**C.** good as
**D.** as well as

**14.**

**A.** NO CHANGE
**B.** nevertheless
**C.** meanwhile
**D.** instead

**15.** Which choice most effectively concludes the essay?

**A.** Podcasts first became popular in the early two thousands.
**B.** Used alongside a written task, a podcast can turn a long commute into extra study time.
**C.** Many podcasts are free to download.
**D.** Some teachers prefer chalk to whiteboards.

# Answer Key: Section 1, English

Mark your paper, then count your correct answers. Read the explanation for every question you missed or guessed.

| Q | Answer | Why it is correct |
|---|---|---|
| 1 | **C** | The subject *neighbours* is plural, so the verb is *share*. |
| 2 | **A** | *But* correctly links the harvest with the contrasting point about social change. |
| 3 | **C** | The subject *starting a garden* is singular, so the present-tense verb is *demands*. |
| 4 | **A** | A comma belongs before *but* when it joins two complete clauses. The other choices place commas where they break the sentence. |
| 5 | **A** | It connects the food (practical) with the conversation (social). The others stay on one narrow detail. |
| 6 | **C** | The passage is in the past tense, so *realised* is needed. |
| 7 | **C** | The two verbs, *held* and *offered*, share one subject, so no punctuation is needed before *and*. |
| 8 | **C** | It shows how he feels. The others give neutral details. |
| 9 | **D** | *Whose* is the possessive form. *Who's* means *who is*. |
| 10 | **A** | It returns to the rain and ends on Tomas's change of mood. |
| 11 | **C** | *To teach* replaces the wordy phrase without losing meaning. |
| 12 | **D** | *Because* joins the reason to the main clause. The comma alone creates a comma splice. |
| 13 | **D** | *Remember* is a verb, so the adverb *well* is needed: *as well as*. |
| 14 | **A** | The written task is a sensible response to the mixed research, so *therefore* fits. |
| 15 | **B** | It returns to the benefit of audio lessons and the written task. The others add unrelated facts. |

**Your score:** _____ / 15

**13 to 15 correct:** strong. **9 to 12:** review the missed topics. **Below 9:** revisit the basics before your next paper.

Section 2

# Maths

15 questions | Suggested time: 17 minutes | Solve each problem and choose the best answer. A calculator is allowed. Figures are not necessarily drawn to scale.

**1.** A car travels at 72 km/h. What is its speed in metres per second?

**A.** 7.2 m/s
**B.** 20 m/s
**C.** 36 m/s
**D.** 259.2 m/s

**2.** What is the value of x if $7 - 2x = 19$?

**A.** $-13$
**B.** $-6$
**C.** 6
**D.** 13

**3.** How much simple interest does $2,000 earn in 3 years at 5% per year?

**A.** $100
**B.** $300
**C.** $315.25
**D.** $2,300

**4.** A line has a slope of 3 and passes through the point (2, 1). What is its y-intercept?

**A.** $-5$
**B.** $-1$
**C.** 3
**D.** 5

**5.** The mean of six test scores is 78. A seventh score of 85 is added. What is the new mean?

**A.** 78.5
**B.** 79
**C.** 81.5
**D.** 85

**6.** Which expression is equivalent to $(3x^2y)(4xy^3)$?

**A.** $12x^3y^4$
**B.** $12x^3y^3$
**C.** $7x^3y^4$
**D.** $12x^2y^3$

**7.** A sector of a circle has a central angle of 90° and a radius of 8 cm. What is its area?

**A.** $4\pi$ cm$^2$
**B.** $16\pi$ cm$^2$
**C.** $32\pi$ cm$^2$
**D.** $64\pi$ cm$^2$

**8.** A coach picks 3 players from a squad of 7, and the order of selection does not matter. How many different groups are possible?

**A.** 21
**B.** 35
**C.** 42
**D.** 210

**9.** A 13-foot ladder leans against a wall with its base 5 feet from the wall. How high up the wall does it reach?

**A.** 8 feet
**B.** 12 feet
**C.** 14 feet
**D.** 18 feet

**10.** If 35% of a number is 63, what is the number?

**A.** 22.05
**B.** 98
**C.** 180
**D.** 220

**11.** What is the minimum value of $y = x^2 - 6x + 13$?

**A.** 3
**B.** 4
**C.** 9
**D.** 13

**12.** Adult tickets cost \$12 and child tickets cost \$7. Ten tickets cost \$95 in total. How many adult tickets were sold?

**A.** 3
**B.** 4
**C.** 5
**D.** 6

**13.** A bag holds 5 red and 3 blue marbles. Two marbles are drawn without replacement. What is the probability that both are red?

**A.** 15/56
**B.** 5/14
**C.** 25/64
**D.** 5/8

**14.** What is $(4 \times 10^5)(3 \times 10^{-2})$ in scientific notation?

**A.** $12 \times 10^7$
**B.** $1.2 \times 10^3$
**C.** $1.2 \times 10^4$
**D.** $7 \times 10^3$

**15.** A tower is 20 m tall and casts a shadow $20\sqrt{3}$ m long on level ground. What is the angle of elevation of the sun?

**A.** 15°
**B.** 30°
**C.** 45°
**D.** 60°

# Answer Key: Section 2, Maths

Mark your paper, then count your correct answers. Read the explanation for every question you missed or guessed.

| Q | Answer | Why it is correct |
|---|---|---|
| 1 | **B** | 72 km/h = 72,000 m ÷ 3,600 s = 20 m/s. |
| 2 | **B** | Subtract 7: $-2x = 12$, so $x = -6$. |
| 3 | **B** | Simple interest = 2,000 × 0.05 × 3 = $300. Choice C is the compound interest. |
| 4 | **A** | Using $y - 1 = 3(x - 2)$, the line is $y = 3x - 5$, so the y-intercept is $-5$. |
| 5 | **B** | The first six scores total 468. Adding 85 gives 553, and 553 ÷ 7 = 79. |
| 6 | **A** | Multiply the coefficients (12) and add the exponents: x gives 2 + 1 = 3, and y gives 1 + 3 = 4. |
| 7 | **B** | The sector is one quarter of the circle: $(1/4) \times \pi \times 8^2 = 16\pi$. |
| 8 | **B** | The number of combinations is $7C3 = (7 \times 6 \times 5) \div (3 \times 2 \times 1) = 35$. |
| 9 | **B** | Height = $\sqrt{(13^2 - 5^2)} = \sqrt{144} = 12$. |
| 10 | **C** | The number is 63 ÷ 0.35 = 180. |
| 11 | **B** | Complete the square: $y = (x - 3)^2 + 4$. The smallest value is 4. |
| 12 | **C** | Let a be adult tickets: $12a + 7(10 - a) = 95$, so $5a = 25$ and $a = 5$. |
| 13 | **B** | $P = (5/8) \times (4/7) = 20/56 = 5/14$. Choice B forgets that the first marble is not replaced. |
| 14 | **C** | Multiply 4 × 3 = 12 and add the exponents: $5 + (-2) = 3$. That gives $12 \times 10^3 = 1.2 \times 10^4$. |
| 15 | **B** | $\tan \theta = 20 \div (20\sqrt{3}) = 1/\sqrt{3}$, so $\theta = 30°$. |

**Your score:** _____ / 15

**13 to 15 correct:** strong. **9 to 12:** review the missed topics. **Below 9:** revisit the basics before your next paper.

Section 3

# Reading

10 questions | Suggested time: 11 minutes | Read each passage and choose the best answer to each question based on what is stated or implied.

## Passage I: The Watch (Prose Fiction)

Mei had never been allowed to touch the watch. It sat in its velvet-lined case on Grandfather's workbench, where it had sat every evening for as long as she could remember, ticking with a steadiness that made the rest of the house seem hurried. Tonight, however, the case was open, and Grandfather was frowning at the watch as though it had insulted him.

"It has stopped," he said, without turning. "Forty years, and it stops on the one night I need it."

Mei crept closer. The tiny wheels lay exposed, delicate as the veins of a leaf. She had seen him repair clocks for half the village, his thick fingers moving with astonishing care, yet he held this watch differently, as if it were something that might bruise.

"Can I help?" she asked.

He hesitated so long that she thought he had not heard. Then he slid the magnifying glass across the bench. "Your hands are steadier than mine now," he said, and the admission seemed to cost him something. "Tell me what you see."

Mei bent over the mechanism, scarcely breathing, and for the first time in her life she felt the watch was listening.

**1.** The first paragraph suggests that Grandfather's watch is:

- **A.** a gift he plans to sell.
- **B.** carefully kept and special to him.
- **C.** ignored by the rest of the family.
- **D.** cheap and often broken.

**2.** Which detail best shows Grandfather's frustration when the watch stops?

- **A.** The tiny wheels lie exposed.
- **B.** He says it stopped on the one night he needed it.
- **C.** He slides a magnifying glass across the bench.
- **D.** Mei creeps closer to the workbench.

**3.** Comparing the wheels to "the veins of a leaf" emphasises that they are:

- **A.** easy to replace.
- **B.** large and noisy.
- **C.** delicate and intricate.
- **D.** green and fresh.

**4.** Grandfather's admission that Mei's hands are steadier suggests that he:

- **A.** accepts, reluctantly, that his own hands are less steady with age.
- **B.** wants Mei to leave the room.
- **C.** has never repaired a watch before.
- **D.** no longer values the watch.

**5.** The final sentence suggests that Mei feels:

- **A.** angry that she was asked to help.
- **B.** frightened of the watch.
- **C.** a new, quiet connection with the watch and her grandfather's trust.
- **D.** bored by the work.

## Passage II: Why We Queue (Social Science)

Anyone who has stood in a line for a bus, a bank counter, or a concert entrance has taken part in a quiet social agreement. Queueing works because most people accept a simple rule: first come, first served. No law requires it, and no one is paid to enforce it, yet in many countries strangers will wait in order for an hour rather than push ahead.

Researchers who study crowds have found that the system depends on visible fairness. When a line is clearly ordered, people tolerate long waits. When it is not, tempers rise quickly, even if the total wait would be shorter. Some shops now use a single line feeding several counters rather than one line per counter, since customers feel the process is fairer when no one can choose the faster queue and then watch another line move ahead.

Queueing customs also differ between cultures. In some places, a line is understood as a strict order; in others, people stand close together and negotiate their turn with eye contact and small gestures. Neither habit is better. Each reflects what a community has learned to expect from strangers.

**6.** Which choice best states the main idea of the passage?

- **A.** Queueing relies on shared expectations of fairness, and those expectations vary between cultures.
- **B.** Queueing customs are identical around the world.
- **C.** Queueing is enforced by strict laws in most countries.
- **D.** Single lines are always faster than multiple lines.

**7.** According to the passage, why do some shops use a single line for several counters?

- **A.** It removes the need for customers to wait.
- **B.** It reduces the total number of staff needed.
- **C.** It is required by law.
- **D.** Customers feel it is fairer because no one picks a line that then moves slowly.

**8.** The passage suggests that people tolerate long waits when:

- **A.** staff are paid to enforce the order.
- **B.** the total wait is short.
- **C.** a law requires them to wait.
- **D.** the line is clearly ordered.

**9.** The statement “Neither habit is better” suggests that:

- **A.** negotiated lines cause more arguments.
- **B.** strict lines are always more efficient.
- **C.** queueing habits never change.
- **D.** queueing customs reflect local expectations and not a universal standard.

**10.** As used in the first paragraph, “agreement” most nearly means:

**A.** paid arrangement.
**B.** shared understanding.
**C.** written contract.
**D.** heated argument.

# Answer Key: Section 3, Reading

Mark your paper, then count your correct answers. Read the explanation for every question you missed or guessed.

| Q | Answer | Why it is correct |
|---|---|---|
| 1 | **B** | It sits in a velvet-lined case on his workbench, and no one is allowed to touch it. |
| 2 | **B** | His complaint about the timing shows his irritation. |
| 3 | **C** | A leaf's veins are fine and complex, so the image stresses delicacy. |
| 4 | **A** | The passage says the admission “seemed to cost him something”, which shows reluctance. |
| 5 | **C** | She is scarcely breathing and feels the watch is listening, which shows awe and connection. |
| 6 | **A** | The passage covers the unwritten rule, the role of fairness, and cultural differences. |
| 7 | **D** | The second paragraph says customers see it as fairer when no one can choose the faster queue. |
| 8 | **D** | The second paragraph says people tolerate long waits when a line is clearly ordered. |
| 9 | **D** | The author says each habit reflects what a community has learned to expect. |
| 10 | **B** | The author notes that no law requires queueing, so the agreement is an unwritten shared understanding. |

**Your score:** _____ / 10

**9 to 10 correct:** strong. **6 to 8:** review the missed topics. **Below 6:** revisit the basics before your next paper.

Section 4

# Science

10 questions | Suggested time: 10 minutes | Each passage is followed by questions. Refer to the passage and tables as needed. A calculator is allowed.

## Passage I: Rolling Down a Ramp

Students rolled a steel ball down a 1.0 m ramp and measured the time it took to reach the bottom.

**Experiment 1:** The students used a smooth wooden ramp and changed the angle of the ramp. The results appear in Table 1.

**Experiment 2:** The students kept the ramp at 10° and covered it with different surfaces. The results appear in Table 2.

**Table 1**

| Ramp angle (°) | Time (s) |
|---|---|
| 5 | 1.81 |
| 10 | 1.28 |
| 15 | 1.05 |
| 20 | 0.91 |

**Table 2**

| Surface | Time (s) |
|---|---|
| Smooth board | 1.28 |
| Felt | 1.60 |
| Sandpaper | 2.10 |
| Carpet | 3.40 |

**1.** In Experiment 1, as the ramp angle increased, the time taken by the ball:

**A.** increased and then decreased.
**B.** increased.
**C.** decreased.
**D.** stayed the same.

**2.** Which variable was kept constant in Experiment 1?

**A.** The speed at the bottom
**B.** The time taken
**C.** The angle of the ramp
**D.** The distance the ball travelled

**3.** According to Experiment 2, on which surface did the ball take the least time?

**A.** Smooth board
**B.** Felt
**C.** Carpet
**D.** Sandpaper

**4.** Based on Table 1, the time for a ramp angle of 12° would most likely be closest to:

**A.** about 1.2 s
**B.** about 2.0 s
**C.** about 1.6 s
**D.** about 0.9 s

**5.** Which statement is best supported by the results of both experiments?

**A.** Both the ramp angle and the surface change how long the ball takes.
**B.** The surface has no effect on the time.
**C.** A steeper ramp makes the ball slower.
**D.** The angle matters only on smooth surfaces.

## Passage II: Soil and Drainage

Students poured 200 mL of water through 100 g of soil in a funnel and measured the volume of water that drained out in 5 minutes.

**Experiment 1:** The students tested four soil types. The results appear in Table 3.

**Experiment 2:** The students mixed sand with different percentages of clay (by mass). The results appear in Table 4.

**Table 3**

| Soil type | Water drained (mL) |
|---|---|
| Sand | 168 |
| Loam | 112 |
| Clay | 48 |
| Peat | 90 |

**Table 4**

| Clay in sand (%) | Water drained (mL) |
|---|---|
| 0 | 168 |
| 10 | 140 |
| 20 | 105 |
| 40 | 60 |

**6.** According to Experiment 1, which soil type drained the most water?

**A.** Clay
**B.** Peat
**C.** Sand
**D.** Loam

**7.** In Experiment 1, how much more water drained through sand than through clay?

**A.** 78 mL
**B.** 56 mL
**C.** 120 mL
**D.** 216 mL

**8.** In Experiment 2, as the percentage of clay increased, the volume of water drained:

**A.** stayed the same.
**B.** increased.
**C.** decreased.
**D.** increased and then decreased.

**9.** Based on Table 4, a mixture with 30% clay would most likely drain about:

**A.** 150 mL
**B.** 50 mL
**C.** 120 mL
**D.** 80 mL

**10.** Which conclusion is best supported by both experiments?

**A.** Peat drains the most water of any soil.
**B.** Clay drains faster than sand.
**C.** Soil type has no effect on drainage.
**D.** Adding clay to sand makes the soil drain more like clay.

# Answer Key: Section 4, Science

Mark your paper, then count your correct answers. Read the explanation for every question you missed or guessed.

| Q | Answer | Why it is correct |
|---|---|---|
| 1 | **C** | The time falls from 1.81 s at 5° to 0.91 s at 20°. |
| 2 | **D** | The ramp length was 1.0 m each time. Angle was changed, and time was measured. |
| 3 | **A** | Table 2 shows 1.28 s for the smooth board, the lowest time. |
| 4 | **A** | 12° lies between 10° (1.28 s) and 15° (1.05 s), so the time is between those values. |
| 5 | **A** | Table 1 shows angle changes the time, and Table 2 shows surface changes the time. |
| 6 | **C** | Table 3 shows 168 mL for sand, the highest value. |
| 7 | **C** | 168 mL minus 48 mL is 120 mL. |
| 8 | **C** | The volume falls from 168 mL to 60 mL as clay rises from 0% to 40%. |
| 9 | **D** | 30% lies between 20% (105 mL) and 40% (60 mL), so the volume is about halfway, near 80 mL. |
| 10 | **D** | Table 3 shows clay drains least, and Table 4 shows more clay in sand lowers the drainage. |

**Your score:** _____ / 10

**9 to 10 correct:** strong. **6 to 8:** review the missed topics. **Below 6:** revisit the basics before your next paper.

# Your Next Steps

Add up your four section scores and note which section cost you the most marks. Spend your next study week on that section, then attempt a fresh paper under timed conditions.

| Section | Your score | Out of |
|---|---|---|
| English | _____ | 15 |
| Maths | _____ | 15 |
| Reading | _____ | 10 |
| Science | _____ | 10 |
| **Total** | _____ | **50** |

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