

BRIGHT SCHOLARS • SUMMER

SUMMER SERIES • GRADE 6 PRACTICE



MASTERING

6TH GRADE

SUMMER

Practice 6th Grade • Get Ready for 7th

A Mixed-Subject Summer Practice Workbook: Vocabulary, Spelling, Math,
Science, and Social Studies

Ten weeks. Every subject. Ready for 7th grade.

VOCABULARY • SPELLING • MATH • SCIENCE • SOCIAL STUDIES

THIS BOOK BELONGS TO

Name _____

Grade Just
Finished _____

Summer Start
Date _____

Summer Finish
Date _____

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Your 10-Week Summer Plan

Do one lesson a day, five days a week. Check the box when you finish a lesson. When a unit's last lesson is done, take its Review Quiz the same day or the next.

WEEK	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
1	☐ 3.1 Science p. 70	☐ 2.1 Math p. 34	☐ 1.1 Words p. 12	☐ 4.1 Soc. Studies p. 125	☐ 3.2 Science p. 73
2	☐ 2.2 Math p. 37	☐ 4.2 Soc. Studies p. 127	☐ 3.3 Science p. 77	☐ 1.2 Words p. 15	☐ 3.4 Science p. 80
3	☐ 2.3 Math p. 40	☐ 4.3 Soc. Studies p. 129	☐ 1.3 Words p. 18	☐ 3.5 Science p. 84	☐ 2.4 Math p. 44
4	☐ 4.4 Soc. Studies p. 131	☐ 3.6 Science p. 88	☐ 1.4 Words p. 21	☐ 3.7 Science p. 91	☐ 2.5 Math p. 46
5	☐ 4.5 Soc. Studies p. 133	☐ 3.8 Science p. 94	☐ 2.6 Math p. 48	☐ 1.5 Words p. 24	☐ 4.6 Soc. Studies p. 135
6	☐ 3.9 Science p. 96	☐ 2.7 Math p. 51	☐ 3.10 Science p. 99	☐ 4.7 Soc. Studies p. 137	☐ 1.6 Words p. 27
7	☐ 3.11 Science p. 102	☐ 2.8 Math p. 54	☐ 4.8 Soc. Studies p. 139	☐ 1.7 Words p. 29 ☐ Unit 1 Quiz p. 31	☐ 3.12 Science p. 105
8	☐ 2.9 Math p. 57	☐ 3.13 Science p. 107	☐ 4.9 Soc. Studies p. 141	☐ 3.14 Science p. 111	☐ 2.10 Math p. 60
9	☐ 4.10 Soc. Studies p. 144	☐ 3.15 Science p. 114	☐ 2.11 Math p. 63 ☐ Unit 2 Quiz p. 67	☐ 4.11 Soc. Studies p. 146 ☐ Unit 4 Quiz p. 148	☐ 3.16 Science p. 117 ☐ Unit 3 Quiz p. 120
10	☐ Final Review A: Words p. 151	☐ Final Review B: Math p. 153	☐ Final Review C: Science p. 154	☐ Final Review D: Social Studies p. 156	☐ Final Assessment and Certificate p. 158

Vocabulary and Spelling

? BIG QUESTION

When you meet a word you have never seen before, how can you figure out what it means and how to spell it?

BY THE END OF THIS UNIT, I CAN

- ☐ I can use context clues (definition, synonym, antonym, example, and general sense) to figure out what a word means.
- ☐ I can choose the meaning of a multiple-meaning word that fits the sentence.
- ☐ I can use prefixes, roots, and suffixes to break apart and understand new words.
- ☐ I can tell the difference between a word's dictionary meaning and its connotation.
- ☐ I can use a dictionary entry to check a word's pronunciation, part of speech, and the meaning that fits.
- ☐ I can find and correct misspelled words using common spelling patterns.

UNIT ROADMAP

- 1.1 Words in Context, Part 1 p. 12
- 1.2 Words in Context, Part 2 p. 15
- 1.3 Words in Context, Part 3 p. 18
- 1.4 Words in Context, Part 4 p. 21
- 1.5 Words in Context, Part 5 p. 24
- 1.6 Spelling, Part 1 p. 27
- 1.7 Spelling, Part 2 p. 29

Suggested time: Weeks 1–7, 7 lessons spread through the summer

Standards: L.6.4a; L.6.4b; L.6.4c; L.6.4d; L.6.5c; L.6.6; L.6.2b

KEY VOCABULARY

- context clue
- multiple-meaning word
- prefix
- root
- suffix
- denotation
- connotation
- dictionary entry
- part of speech
- spelling pattern

Order of Operations

KEY TERMS expression • evaluate • order of operations • parentheses



SKILL REFRESHER

An **expression** is a group of numbers and operation signs, such as $6 + 4 \times 2$. To **evaluate** an expression means to find its value. Everyone uses the same **order of operations**, so every expression has exactly one correct value.



ORDER OF OPERATIONS

1. Parentheses: do the work inside parentheses first.
2. Exponents: evaluate powers (you will practice these in Lessons 2.8 and 2.9).
3. Multiply and divide in order from left to right.
4. Add and subtract in order from left to right.

Multiplication does not always come before division. Do whichever one comes first as you read from left to right. Addition and subtraction work the same way: $15 - 5 + 2 = 10 + 2 = 12$, not $15 - 7$.



EXAMPLE 1 Evaluate $(9 - 4) \times (3 + 5)$

STEP 1 Work inside each set of parentheses: $9 - 4 = 5$ and $3 + 5 = 8$.

STEP 2 Multiply: $5 \times 8 = 40$.

ANSWER 40



EXAMPLE 2 Evaluate $18 - 2 \times 6 + 4$

STEP 1 There are no parentheses, so multiply first: $2 \times 6 = 12$. The expression becomes $18 - 12 + 4$.

STEP 2 Subtract and add from left to right: $18 - 12 = 6$, then $6 + 4 = 10$.

ANSWER 10



PARENTHESES FIRST

Evaluate each expression. Work inside the parentheses first.

1

$$(7 + 9) + (4 + 1) =$$

2

$$(7 \times 2) + (1 + 7) =$$

3

$$(8 \times 5) \times (4 + 7) =$$

Air Pollution

KEY TERMS air pollution • fossil fuel • smog • acid rain • ozone layer • ultraviolet (UV) radiation

SKILL REFRESHER

Air pollution is any harmful gas, chemical, or particle in the air. Most of it comes from burning **fossil fuels** (coal, oil, and natural gas) in power plants, factories, homes, and vehicles.

THREE AIR POLLUTION PROBLEMS

Smog is a brownish haze that forms over cities when vehicle exhaust and factory smoke react in sunlight. It contains ground-level ozone and makes breathing harder.

Acid rain forms when sulfur and nitrogen gases from burning fuels mix with water in the air. It can harm fish and wildlife in lakes and streams, damage forests, and wear away stone buildings.

Ozone is helpful high in the atmosphere, where the **ozone layer** absorbs much of the sun's harmful ultraviolet (UV) radiation. Near the ground, ozone is a pollutant that harms the lungs.

People can reduce air pollution by driving less, using cleaner energy such as wind and solar power, and adding insulation to homes so less fuel is burned for heating and cooling.

CHECK THE BEST ANSWER

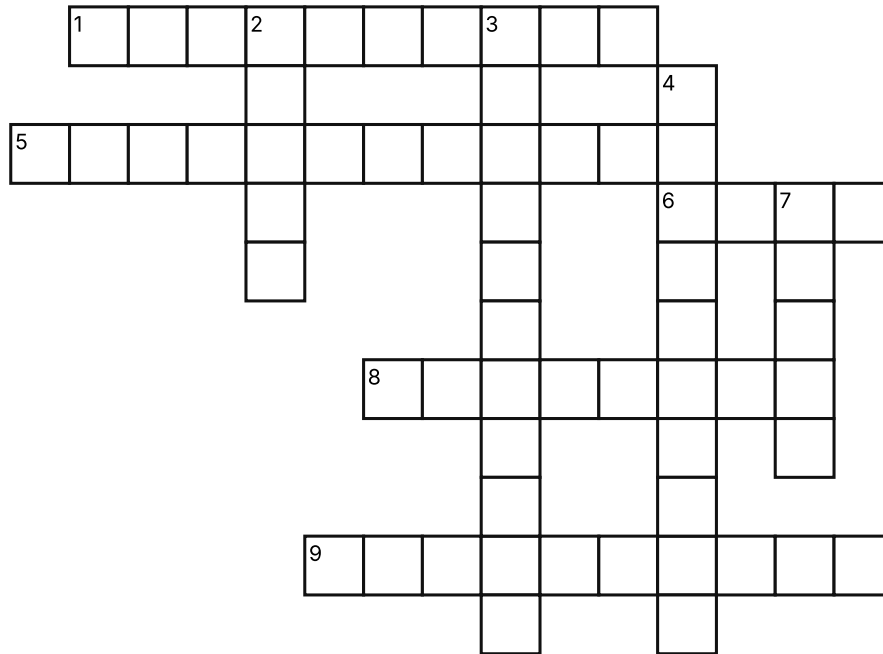
- 1 What do coal, oil, and natural gas have in common?
 - (A) They are renewable sources of energy.
 - (B) They are all fossil fuels.
 - (C) They give off no pollution when burned.
 - (D) They form in a few years from fallen leaves.
- 2 How does acid rain affect the environment?
 - (A) It makes lakes less acidic, which helps fish grow.
 - (B) It gives people acid burns when they walk in it.
 - (C) It adds ozone to the upper atmosphere.
 - (D) It can harm fish and other wildlife in lakes and streams.



CROSSWORD

8

Use the clues to complete the crossword: Air Pollution.



ACROSS

1. An energy source formed from the remains of prehistoric organisms (2 words)
5. Chemicals or particles in the air that can harm the health of people, animals, and plants (2 words)
6. A mixture of smoke and fog; it can contain ozone, a molecule made of three oxygen atoms
8. Rain, snow, or fog made acidic by pollutants in the air (2 words)
9. _____ gases trap heat in the atmosphere and add to global warming.

DOWN

2. This comes from factories, vehicles, and fires; it can carry carbon dioxide and sulfur oxides into the air.
3. These rays are given off by the sun; in large amounts they can harm skin and eyes.
4. When added to a house, this reduces the energy needed for heating and cooling.
7. The _____ layer of the upper atmosphere absorbs much of the sun's ultraviolet radiation.

9. questionnaire → questionnaire
10. visinity → vicinity
11. proppose → propose
12. cuniform → cuneiform
13. deforrestation → deforestation
14. aparently → apparently
15. barbarrian → barbarian
16. Answers vary. Sample: ammunition: "Ammunition has two m's, like a mighty military." Look for a trick that points to the tricky letters.
17. Answers vary. Sample: ph: phloem, photograph, telephone, alphabet. ch: chromosome, chaos, school, character.

Unit 1 Review Quiz (p. 31)

1. **C.** She cannot be in two places at once and does not know which to choose.
2. **A.** "Unlike his quiet sister" is an antonym clue, and chatting with everyone shows he is sociable.
3. **D.** A drought causes a shortage of water, so watering is limited.
4. **B.** Rain and weather damaged the bench until it became unsafe.
5. **C.** The bike stays in one place, which is why you never leave the room.
6. **A.** Sunlight and water help plants thrive.
7. **D.** Forgetting to feed a pet shows a lack of proper care.
8. **B.** The root cent- means one hundred.
9. **C.** Scientists look into the problem carefully to learn the cause.
10. comercial → commercial
11. negligant → negligent
12. carefuly → carefully
13. dictionery → dictionary

Unit 2: Math Review and Practice

Lesson 2.1 Order of Operations (p. 34)

1. 21 ($16 + 5$)
2. 22 ($14 + 8$)
3. 440 (40×11)
4. 18 ($18 - 0$)
5. 70 (14×5)
6. 70 (14×5)
7. 720 (30×24)
8. 33 ($3 + 30$)
9. 17 ($3 + 14$)
10. 972 (81×12)
11. 1,008 (56×18)
12. 12 ($16 - 4$)
13. 32 ($8 + 24$)
14. 1,764 (63×28)
15. 17 ($6 + 11$)
16. 52 (4×13)
17. 196 (14×14)
18. 24 ($0 + 24$)
19. 8 (8×1)
20. 9 ($18 - 9$)
21. 140 (4×35)
22. 30 ($36 - 6$)
23. 252 (18×14)
24. 91 (13×7)
25. 10 ($0 + 10$)
26. 7 ($5 + 2$)
27. 0 (12×0)
28. 6 ($4 + 2$)
29. 48 (3×16)
30. 9 ($9 - 0$)
31. 198 (11×18)
32. 70 (35×2)
33. 4 ($4 - 0$)
34. 7 ($4 + 3$)
35. 86 ($14 + 72$)
36. 384 (48×8)
37. 6 ($0 + 6$)
38. 0 (0×14)
39. 96 (2×48)
40. 17 ($2 + 15$)
41. 26 ($6 + 20$)
42. 24 ($30 - 6$)
43. 11 ($21 - 10$)
44. 22 ($4 + 18$)
45. 13 ($40 - 30 + 3$)
46. 17 ($16 \div 4 = 4$, then $4 \times 2 = 8$, then $9 + 8$)
47. 27 (divide first because it comes first from left to right: 9×3)
48. 20 (subtract from left to right: $30 - 10$)
49. 21 ($15 \times 2 - 9 = 30 - 9$)
50. 11 ($45 \div 9 + 6 = 5 + 6$)
51. 10 ($5 \times 6 \div 3$)
52. 13 ($3 + 2 \times 5 = 3 + 10$)