

Mrs Wordsmith®



PARENT & EDUCATOR GUIDE





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FOREWORD

When Mrs Wordsmith asked me to help them reimagine how vocabulary should be taught, I immediately perked up.

Vocabulary instruction has always had a reputation for being boring and ineffective, consistently falling into the trap of rote learning. But vocabulary is so critical in helping students increase their reading age and do better in school - in all subjects. It is one of the single biggest indicators of academic success, benefitting everything from self-expression to emotional intelligence.

We need to stop boring our students. We need to meet kids where the conversation is. We're seeing TikTok, Kahoot, and Minecraft take over the classroom. They are fast becoming teachers' tools of choice. But there is nothing quite so exciting on offer to help improve reading outcomes.

Until now, that is. Word Tag helps players develop vocabulary knowledge - one of the building blocks of reading. And it encourages creativity, and an appreciation for language and art. It is a truly innovative, educational project, the only game that kids will be allowed to play all day, every day. I've enjoyed the journey of bringing it to the world.

Susan B Neuman

Professor of Childhood and Literacy Education, NYU



OUR EXPERTS



Word Tag was developed with creative talent and academic experts from:



Prof. Susan Neuman

Educator, researcher, and education policy-maker in early childhood and literacy development. Chair of the Department of Teaching and Learning at NYU. Former Assistant Secretary of Elementary and Secondary Education in the US Department of Education.



Prof. Ted Briscoe

Expert in computational linguistics, speech and language processing, textual information processing, and evolutionary linguistics. Professor of Computational Linguistics at the University of Cambridge and the inaugural director of the Alta Institute.



Michael Levine

Expert on children's education and media, and Sesame Workshop's first Chief Knowledge Officer. Advisor to a number of US government agencies including the White House, the Department of Education, PBS, and the Corporation for Public Broadcasting.



Eleni Savva

Expert in linguistic semantics, and is In-House Pedagogy Lead at Mrs Wordsmith. MPhil in Linguistics from the University of Oxford and PhD in Linguistics from the University of Cambridge.



Björn Jeffery

Advisor in digital strategy & consumer culture. Former CEO and Co-Founder of Toca Boca – one of the most successful mobile kids' brands in the world with over 200,000,000 downloads globally.



Laurids Binderup

Award-winning game design lead, formerly of Playdead and SYBO Games. Credits include Subway Surfers (enjoyed by over a billion players worldwide) and the critically-acclaimed LIMBO and Blades of Brim.

INTRODUCING WORD TAG: A WORD GAME LIKE NO OTHER



Learn up to 1,000 challenging words per year while exploring real cities, powered by words. Learn, earn, and create with friends. Players compete to reach the top of the Readerboard in an epic race to paint the city and build their dream junkyard eco-home.

Word Tag was developed with literacy experts and Hollywood talent, combining action-packed gameplay with world-leading educational design.

With a methodology designed to teach challenging vocabulary, Word Tag boosts reading comprehension, advances creative and academic writing, and improves exam performance.

- Adaptive learning and player reports
- Develops creativity and resourcefulness
- Made with world-leading literacy talent
- Trusted by teachers
- Teaches Tier 2 vocabulary frequently encountered in school and on exams



AN EPIC 3D ADVENTURE

Research shows that kids learn best when they're having fun, and with Word Tag that's exactly what they do. Players take control of Barsky, a voracious word hound and rising street art star. Along the way, they meet Cuco, Smashtag, and Pepperoni, a crew of junkyard misfits and aspiring artists on a mission to power the city with words.





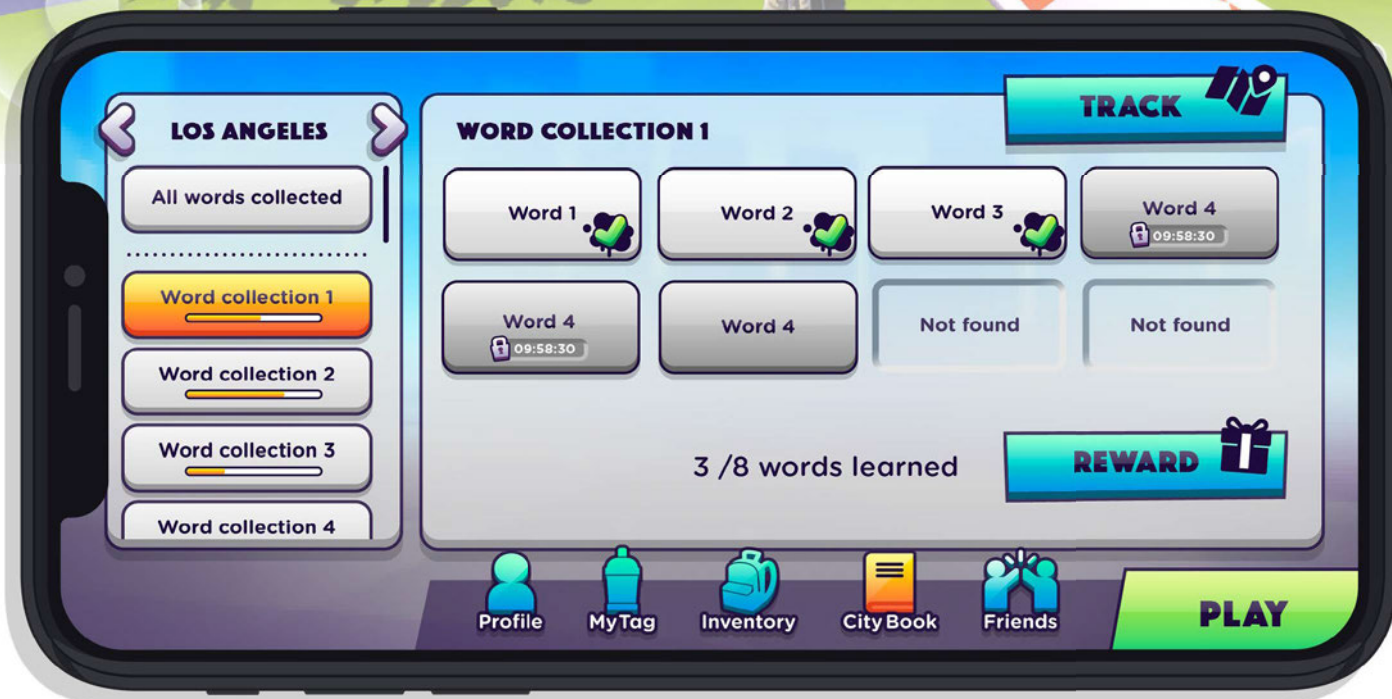
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100

ALLURING

THIS CITY IS POWERED BY



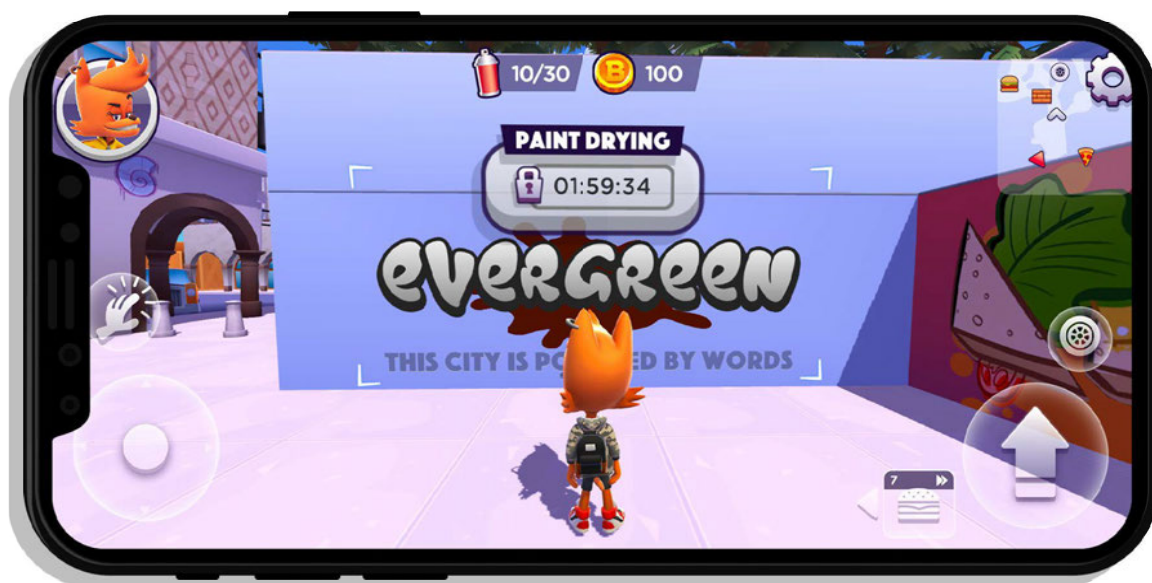
EXPLORE, PLAY, AND LEARN

In Word Tag, players can learn up to 1,000 words in a year by exploring cities, finding new vocabulary, and spraying walls with street art. At each stop, players are given a City Book to complete - this is their essential vocabulary review tool, storing every word players have encountered. Players earn extra coins and unlock rewards by completing gamified Pop Quizzes to ensure they retain what they learn.



DESIGNED TO INCREASE EVERY PLAYER'S READING AGE

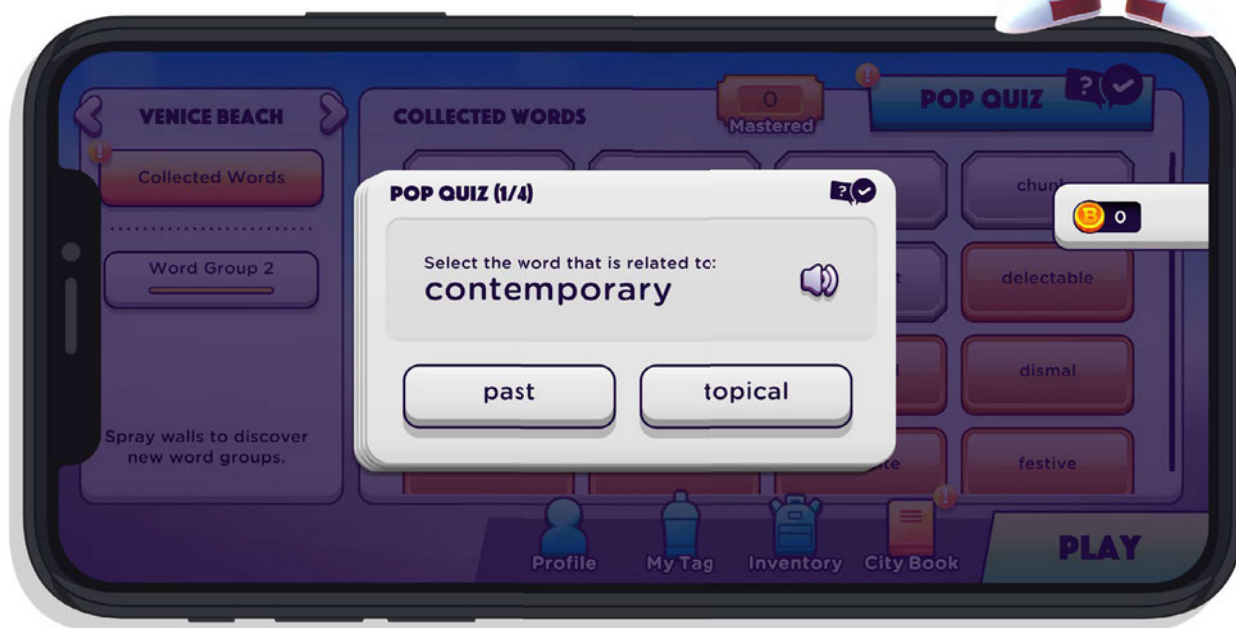
Every 1,000 words that a player learns increases their receptive vocabulary and can help improve their reading age by approximately one year. Vocabulary includes Tier II academic words frequently encountered in school texts and on exams such as the SSAT, ISEE, PSAT, SAT, Star, MAP (US), 11+, 13+ GCSE (UK), and TOEFL, CEFR (for speakers with English as their second language).





WORDS IN CONTEXT

The journey begins in sprawling Los Angeles, where players learn words related to climate change, diversity, and creativity. At every stop on their journey there's a new City Book to complete. Real, cartoon-modelled 3D cities provide a rich context for words learned. In addition to current events vocabulary, Word Tag Cities also provide an exciting backdrop for diversity and unprecedented opportunities for exploration.





DEVELOP CREATIVITY AND RESOURCEFULNESS

Players' junkyard homes provides a blank canvas for creativity and resourcefulness in building different environments and creating shelters before night falls. Players customize their junkyard by collecting scarce resources such as corrugated sheets or finding furniture to fix. It's eco-friendly upcycling!





CHALLENGE YOURSELF TO LEARN, EARN, AND SURVIVE

In order to survive and thrive, players must continually learn new words. Words provide access to resources and opportunities to overcome challenges, such as feeding characters, building shelter, and escaping the evil Street Cleaners!





BUILD YOUR WORD-LOVING COMMUNITY

Using Word Tag's safe social features, players collaborate to learn more words. They can visit each other's junkyard homes, and send messages to friends with clues about how to progress in the game.

But it isn't all friendly - players also compete! Only one player in your community can be crowned the leaderboard's Top Dog. Resources have varying degrees of scarcity and failure to find them may result in sudden (and often laugh-out-loud) setbacks in a player's learning adventure.

Word Tag social features are safe for children under the age of 13. Chat is restricted to leaving emojis and other visual clues - there is no text chat or conversation. Finding friends is Coppa-compliant and certified by Privo.





ADAPTIVE LEARNING AND PLAYER REPORTS

Throughout Word Tag, players are assessed to ensure that the vocabulary they encounter is the right level of challenging. This begins with a simple level test - before getting started with the game, players are asked if they know the meaning of certain words. Based upon the results of this test, a word list is generated that is a year or two above the player's age and ability. Research shows that students can learn vocabulary that is well above their reading age if taught effectively.¹

Player progress is measured by:

- the number of times each word is encountered
- performance on exercises and quizzes
- the number of words learned

Words are taught through visual verbal reasoning exercises and quizzes. Players learn synonyms, antonyms, and definitions of words by selecting answers on a virtual wall and then spraying the word as a sign of accomplishment.

Every week, players receive a report that shows how many words they have learned, as well as what progress they have made through completing their City Book.



¹ Beck, I. and McKeown, M. (2007) Increasing young low-income children's oral vocabulary repertoires through rich and focused instruction. *The Elementary School Journal*. 107 (3), pp.251-271.



HOW VOCABULARY INCREASES READING AGE

Vocabulary development is closely correlated with reading comprehension and general academic achievement. Unless readers know what the words they encounter mean, they can neither enjoy the content of a text, nor learn from it. Pre-teaching words that students are likely to encounter frequently when they read is therefore extremely beneficial. Studies have reported that thorough vocabulary teaching was associated with improvement in reading comprehension.²

According to research, in order to grasp and retain words and comprehend texts, students need repeated exposure to new words in a range of different but authentic and relevant contexts that go beyond the classroom. This variety of relevant contexts helps students understand what words mean, how to use them, and how they relate to the world around them.

Finally, vocabulary learning is boosted by tasks that call for active engagement. Exciting, hands-on tasks increase motivation and engage the brain in a way that fosters the retention of new words.

² National Reading Panel. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction. Reports of the subgroups*. Washington, DC: National Institute of Child Health and Human Development.

WHY WORD TAG WORKS



- 1 Active engagement**

Playing games is especially effective for vocabulary learning because it's so active. Word Tag is all about engaging with and having fun with new words, which significantly increases retention.^{4 5}
- 2 Spaced repetition**

According to research, students need several encounters with a word in order to learn it. Word Tag exposes players to words in spaced intervals, repeating the same word enough times to guarantee retention.
- 3 Learning progression**

Research has also demonstrated that games can provide constructive feedback and a feeling of accomplishment. Word Tag allows students to try until they succeed, and is tailored to players' level and skill.
- 4 Self-directed learning**

Free play and exploration is crucial for students' cognitive development because it cultivates their innate curiosity and desire to learn.⁶ In Word Tag, players explore whole cities, complete City Books full of rich vocabulary at their own pace, and choose how long and how often they want to play.
- 5 Character-based learning**

Research suggests that interacting with fictional characters such as Barksy and the crew has numerous educational and psychological benefits.⁷ Learners are more likely to retain new information if it is presented to them by a character, and even more so if they are helping a character complete a mission. Identifying with a relatable character can even increase learners' empathy.

³ Common Core State Standards Initiative (2010). *Common Core Standards for English Language Arts & Literacy in History/Social Studies, Science and Technical Subjects*. Available at: http://www.corestandards.org/wp-content/uploads/ELA_Standards1.pdf

⁴ Rood, E. E. Hadani, B. Liberman, A. Whiteside (2016). *Reimagining School Readiness: A Position Paper with Key Findings*. Center for Childhood Creativity. Sausalito, CA.

⁵ Abrams, S. S., and Walsh, S. (2014). *Gamified Vocabulary. Online resources and enriched language learning*. Journal of Adolescent & Adult Literacy, 58(1): 49-58.

⁶ Hadani, (2015)

⁷ Gray, J., Reardon, E., & Kotler, J. (2017). *Designing for Parasocial Relationships and Learning: Linear Video, Interactive Media, and Artificial intelligence*. In *Proceedings of the 17th International Conference on Interaction Design and students (IDC 17)*. ACM, New York, NY, USA, 227-237.

WORD ENGINE

According to literacy experts, learners should be taught words that they are likely to encounter frequently across a range of different contexts.⁸ To identify the words that students need to know, our team of linguists and data scientists mine databases of vocabulary found in:

- classic literature
- major exams such as the PSAT, SAT, SSAT, Star, MAP, Dibels, and ISEE (US SATs, 11+ and GCSE (UK)
- TOEFL, CEFR (for speakers with English as their second language)
- school curricula

These word lists are fed into Mrs Wordsmith's state-of-the-art Word Engine, which classifies them based on their difficulty and topic. Our algorithm takes into account the context in which each word is likely to appear, and assesses its meaning difficulty based on its average age of acquisition and its Lexile Grade Level. This way, players are exposed to a selection of words that is tailored to their ability and needs. The table below shows the different types of words that players encounter in Word Tag.

Types of Words	Explanation
US exams	Words that appear frequently in exams such as State Assessments, Star, MAP, Dibels, SSAT, ISEE, PSAT, SAT, TOEFL, Lexile Reading Assessment, and other verbal reasoning/reading assessment tests
UK exams	Words that appear frequently in exams such as KS2 SATs, CATs, ISEB 11+,13+, GCSE, CEFR and other verbal reasoning/reading comprehension tests
Analytical and cross-curricular	Words that help learners understand nonfiction texts and express themselves with precision and sophistication in any subject
Creative writing and literature	Descriptive words that help learners understand fictional texts and write brilliant stories
STEAM	Words that unlock concepts related to science, technology, the environment, the arts, and mathematics
Inspirational	Words that inspire players to be kind, to imagine and create, and to strive and persevere
Grammar & language learning	Words that will increase student's language consciousness such as groups of synonyms, antonyms, homophones, commonly misspelled words

⁸ <https://shanahanonliteracy.com/blog/the-six-goals-of-an-ideal-vocabulary-curriculum>



SAMPLE WORD LISTS

	Level 1	Level 2	Level 3	Level 4	Level 5 ⁹
Age and grade bands	5 to 7 years Kindergarten- 1st Grade/ Year 1-Year 2	7 to 9 years 2nd-3rd Grade/ Year 3-Year 4	9 to 11 years 4th-5th Grade/ Year 5-Year 6	11-13 years 6th-7th Grade/ Year 7-Year 8	14+ years 8th Grade onwards/ Year 9 onwards
Exams	Words from all categories below appear frequently in major exams in the US and UK, grouped in a way that will help learning and revision.				
Analytical and cross-curricular	once about because	compare contrast evergreen	perennial conclusion demonstrate	plausible justification ambiguous	scepticism connotation qualitative
Creative writing and literature	giant fairy monster good/evil	blazing shelter embers taunt	siege frequent turbulent	smouldering deflated emaciated	inept presumptuous vivacious
STEAM	add subtract square recycle	drought wildfire hazard catastrophe	combustible density debris turbine	photosynthesis retardant deploy deforestation	corrugated rehabilitation biosphere mitigate
Inspirational	try tough dream	grit unique inspire	persevere gratitude resourceful	persevere gratitude resourceful	devotion tenacious phenomenal
Grammar & language learning	to-too-two big-bigger- biggest	honest/ dishonest possible/ impossible	morning/ mourning accept/ except	morning/ mourning accept/ except	ascent/ assent allusion/ illusion compliment/ complement

⁹ At this level, the words are challenging even for adults but appear often in texts and exams for ages 15+.

SCOPE AND SEQUENCE OVERVIEW

Level 1

Kindergarten - 1st Grade | Year 1 - 2

General vocabulary skills and language

- Vocabulary acquisition and use
- Synonyms and antonyms
- Shades of meaning
- Sorting words into categories
- Real life word connections and applications
- Use context as a clue to the meaning of a word
- Use common prefixes and suffixes as a clue to the meaning of words
- US Assessments: State/CCSS, Dibels, MAP Reading and Star
- UK Assessments: KS1 Phonics Screening, SATs, 7+
- TOEFL, CEFR A1

Vocabulary to support Reading Comprehension & Literature

- Words to talk about key details in a text
- Words to re-tell familiar stories
- Storytelling words - character, settings, and major events in a story
- Words to compare and contrast the adventures of characters
- Words to understand feelings in a text

Vocabulary to support Reading Comprehension & Informational Texts

- Words to talk about key details in a text
- Connections between individuals, events, ideas, or pieces of information
- Words to talk about differences and similarities between texts
- Words to describe points of view
- Cause and effect

Level 2

2nd - 3rd Grade | Year 3 - 4

General vocabulary skills and language

- Use adjectives and adverbs appropriately
- Use collective nouns
- Use context as a clue to the meaning of a word
- Use common prefixes and suffixes as a clue to the meaning of words
- Compound words
- Shades of meaning
- Sorting words into categories
- Real-life word connections and applications
- US Assessments: State/CCSS, Dibels, MAP Reading and Star
- UK Assessments: KS1/KS2 SATs, 7+, 8+
- TOEFL, CEFR A2

Vocabulary to support Reading Comprehension & Literature

- Words to talk about key details in a text
- Words to re-tell familiar stories
- Storytelling words - character, settings, and major events in a story
- Words to compare and contrast the adventures of characters
- Words to understand feelings in a text

Vocabulary to support Reading Comprehension & Informational Texts

- Talk about the main topic, focus, and purpose of a text
- Inference and evidence
- Connections, comparisons and relationships
- Talk about cause and effect
- Compare and contrast the points presented by texts on the same topic
- Interpretation of knowledge and ideas

Level 3

4th-5th Grade | Year 5 - 6

General vocabulary skills and language

- Correctly use frequently confused words
- Use words that convey ideas precisely
- Use context as a clue to the meaning of a word
- Use common prefixes and suffixes as a clue to the meaning of words
- Synonyms and antonyms
- Multiple meaning words
- Grammatical concepts
- US Assessments: SSAT/ISEE, State/CCSS, MAP Reading and Star
- UK Assessments: KS2 SATs, 11+
- TOEFL, CEFR B1

Vocabulary to support Reading Comprehension & Literature

- Narrative vocabulary around character, setting, plot
- Figurative language
- Connotation
- Word choices that influence the meaning or tone of a text
- Classical literature vocabulary

Vocabulary to support Reading Comprehension & Informational Texts

- Inference and evidence
- Cause and effect
- Connections, comparisons and relationships
- Words to describe points of view and argumentation
- Analytical tier 2 vocabulary
- Interpretation of knowledge and ideas

Level 4

6th - 7th Grade | Year 7 - 8

General vocabulary skills and language

- Use context as a clue to the meaning of a word
- Use common affixes and roots as clues to the meaning of a word
- Use the relationship between particular words to better understand each of the words
- Synonyms and antonyms
- Words with multiple meanings
- Grammatical concepts
- US Assessments: SSAT/ISEE, State/CCSS, MAP Reading and Star
- UK Assessments: KS3, 13+, GCSE
- TOEFL, CEFR B2

Vocabulary to support Reading Comprehension & Literature

- Narrative vocabulary around character, setting, plot
- Figurative language
- Connotation
- Word choices that influence the meaning or tone of a text
- Classical literature vocabulary

Vocabulary to support Reading Comprehension & Informational Texts

- Inference and evidence
- Cause and effect
- Connections, comparisons and relationships
- Words to describe points of view and argumentation
- Analytical tier 2 vocabulary

Level 5

8th Grade + | Year 9 +

General vocabulary skills and language

- Use context as a clue to the meaning of a word
- Words with multiple meanings
- Use the relationship between particular words to better understand each of the words
- Identify and correctly use related words (e.g., analysis, analytical)
- Acquire and use accurately general academic and domain-specific words
- Synonyms and antonyms
- Grammatical concepts
- US Assessments: PSAT, SAT, State/CCSS, MAP Reading and Star
- UK Assessments: KS3, 13+, GCSE
- TOEFL, CEFR C1-C2

Vocabulary to support Reading Comprehension & Literature

- Narrative vocabulary around character, setting, plot
- Figurative language
- Connotation
- Word choices that influence the meaning or tone of a text
- Classical literature vocabulary

Vocabulary to support Reading Comprehension & Informational Texts

- Inference and evidence
- Cause and effect
- Connections, comparisons, and relationships
- Words to describe points of view and argumentation
- Analytical tier 2 vocabulary
- Interpretation of knowledge and ideas



The exciting new reading
game from award-winning
education publisher...

Mrs Wordsmith®

