

Progress Report Glossary

Reading and Spelling Glossary

A

Affix

A spelling pattern added before (see **prefix**) or after (see **suffix**) a root word to modify its meaning

Alphabetic principle

The idea that letters and letter patterns represent the sounds of spoken language

Anchor chart

A student-created visual aid that facilitates long-term memory recall for letter sounds, spelling rules, strategies, etc.

Auditory discrimination

The ability to detect differences in sounds (e.g. hearing the difference between /m/ and /n/)

Automaticity

Reading without conscious effort or attention to decoding

B

Base word

A unit of meaning that can stand alone as a whole word (e.g., **friend**, **pig**); also known as a free morpheme

Blending

The process of smoothly combining all the sounds or parts of a word to read it as a whole

Bossy E Rule

A spelling/reading pattern where the **e** at the end of a word (after a consonant) makes the vowel preceding the consonant a long vowel, whereby the vowel “says its name” (e.g. **cake, time, mile**)

Tricky Bossy E rules

- Sometimes an **s** followed by an **e** makes a /z/ sound as in **fuse**;
- Sometimes a **c** followed by an **e** makes a /s/ sound as in **face**;
- Sometimes a **g** followed by an **e** makes a /j/ sound as in **cage**.
- No words in English end in the letter **v**, so a silent **e** always follows a final /v/ sound; sometimes it is a Bossy E word as in **save** and **five**, but most of the time the vowel stays short as in **have** and **give**

C

CCVC Words

Single syllable words, often beginning with a **digraph** or **consonant blend** and following the pattern consonant, consonant, vowel, consonant (e.g. **this, slip, chat**)

Chunking

Breaking words, sentences, or even assignments, into smaller ‘chunks’ to make them more manageable

CK Rule

A spelling pattern where **-ck** is used to make the /k/ sound after a short vowel; mostly used at the end of words; can sometimes be found in the middle of a word, but is never used at the beginning of a word

Clicker

A reading tool that helps students notice and kinaesthetically mark punctuation, spelling patterns, or other details while reading

Consonant

A letter of the alphabet whose sound is produced when the flow of air is obstructed; it can be combined with a vowel to form a syllable (e.g. **b, c, d**)

Consonant blend

A combination of consecutive consonants whose sounds blend together, but each individual sound can still be heard

Types of blends

1) s-blends – **sp, sk, sm**, etc.

2) l-blends – **pl, bl, gl**, etc.

3) r-blends – dr, pr, br, etc.

4) digraph blends – formed when a digraph is blended with another consonant, e.g. shr, thr, nch

5) three-letter blends – blends with three letters, e.g. scr, spr, str, spl

6) final blends – two consonants that blend at the end of words, e.g. mp, nt, st, ft, nd, lk, ld, lf

Consonant digraph

Two consonants that together produce only one sound (e.g. ch, sh, th, wh, ck)

Contraction

A shortened form of two words, where the omitted letter (usually the vowel of the second word) is replaced with an apostrophe (e.g. did not → didn't)

CVC Words

Single syllable words following the pattern of consonant, vowel, consonant (e.g. cat, sit, ten)

D

Decodable readers

A type of text/story in which readers can decode words using the phonics skills they have previously learned, i.e. all of the words in the text follow the rules that students have already learned

Decoding

The ability to recognize and interpret letter/sound relationships and spelling patterns within words in order to read them accurately

DGE Rule

Words that end with a /j/ sound and have a short vowel are spelled with a **-dge** at the end (e.g. fudge); if the word ends with a /j/ sound but has a long vowel sound, it's spelled with **-ge** at the end (e.g. cage).

Diphthong

A variant vowel sound made by two consecutive vowels in a syllable, where the sound glides from one vowel to another (e.g. oy, oi, ow)

Dolch words

A list of frequently used English words found in children's books, also known as **sight words**

E

Elkonin boxes

Sometimes referred to as sound boxes or sound frames, Elkonin boxes can be drawn around sounds or syllables within a word in order to visually segment them. Alternatively, students may separate letter tiles or cards for the same purpose

Encoding

The ability to use learned letter/sound relationships and word structures to spell words correctly

F

Fizzle Rule (FFSSZZLL Rule)

A spelling rule where words with a short vowel that end in **f, l, s, or z** have the final letter doubled (e.g. **sniff, fill, miss, buzz**)

Fry Words

A list of some of the most commonly used words in the English language, listed in order of frequency and including all parts of speech

I

Irregular Word

A word that contains letters that stray from the most common sound pronunciation; words that do not follow common phonic patterns (e.g., were, was, laugh, been)

K

K-W-L

A technique used most frequently with expository text to promote comprehension. It can be used as a type of graphic organiser in the form of a chart, and it consists of a 3-step process: What I Know (accessing prior knowledge), What I Want to Know (setting a purpose for reading), and What I Learned (recalling what has been read)

L

Levelled readers

Numerically or alphabetically labelled books that increase in difficulty and are used to monitor a child's progress in learning to read; books are matched to individual students' reading levels so that they are challenging enough for the student to make progress, but not so difficult that they cause the student frustration

Letter-sound correspondence

The matching of an oral sound to its corresponding letter or groups of letters.

M

Medial sound

A sound found in the middle of a word (e.g. /a/ in the word cat)

Multisensory instruction

Teaching/learning that engages more than one sense modality at a time (e.g. seeing (visual), hearing (auditory), and touching (tactile))

N

Nonsense word

A term used in the ***Wilson Reading Program*** to denote words that are not real and have no meaning, but can be read and spelt by applying the sound and spelling rules in the program (e.g. **tez, quop, shrungle**)

O

Onset

The initial or beginning sound of a word (e.g. /c/ in the word cat)

OO Rule

Sometimes oo sounds like a long /u/ sound as in **choose** and sometimes it makes a short sound as in **book** or **look**

P

Phoneme

An individual sound; the smallest unit that a word can be broken down into (e.g. /f/, /sh/, etc.)

Phoneme deletion

The ability to identify how a word will sound if one phoneme is taken away (e.g. take away the /c/ in **cat** and you are left with **at**)

Phoneme insertion

The action of adding a **phoneme** into a word that was not previously there. This can be done voluntarily, but may also be due to a decoding error (e.g. sip → slip)

Phoneme isolation

The ability to isolate a single sound in a word based on its position (e.g. the /a/ in **cat** is in the middle of the word, and the final sound is a /t/)

Phoneme manipulation

The ability to add, substitute, or rearrange sounds in a word to create a new word or words

Phoneme substitution

The action of replacing one **phoneme** in a word with a different phoneme to create a new word (e.g. replacing the /b/ in the word **bat** with /c/ to make a new word, **cat**)

Phonemic awareness

The ability to hear, identify, sequence, and manipulate individual sounds within words; the most important predictor of success in learning to read and write

Phonetic spelling of words

The action of spelling words using the phonemes that are heard, thereby generating a word that can be decoded but may not be spelled correctly

Phonological awareness

The ability to recognize that words are made up of a variety of sound units

Prefix

A spelling pattern added to the beginning of a word that changes its meaning (e.g. by adding prefixes to the **root word moral** new meanings can be formed **moral** → **amoral**, **immoral**)

Prosody

Reading with expression, proper intonation, and phrasing. This helps readers to sound as if they are speaking the part they are reading. It is also this element of fluency that sets it apart from automaticity

R

RAP/RACE strategy

A reading response strategy for short-answer questions. The acronym stands for **R**estate the question, **A**nsWER the question, **P**rove it with text; alternatively, **R**estate the question, **A**nsWER the question, **C**ite evidence from the text, **E**xplain the evidence

Reading comprehension strategies

Strategies used, when reading, to actively think about and understand a text on different levels

1) Visualising

Creating pictures, in one's head, based on the text being read or heard

2) Asking Questions

Posing questions about the text to clarify its meanings and better understand the content

3) Making Predictions

Using information from the text and one's knowledge to anticipate what will happen or be read next

4) Making Connections

Relating information from the text to another text (text-to-text), to one's personal experience (text-to-self), or to one's knowledge (text-to-world)

5) Summarising

Linearly relaying the content of the text by focusing on its most important or main ideas

6) Inferencing

Using clues from the text and one's knowledge to draw conclusions about information not explicitly stated

Reading Mastery

A direct instruction reading program designed to foster phonemic and phonological awareness using a systematic, structured, and teacher-guided approach

Reversals

Letters and/or numbers that are printed backwards (e.g. **b** and **d**)

Rime

The string of letters that follow the **onset** in a word; usually a vowel followed by one or more consonants; this is the part of a word that will make it rhyme with words that have the same ending (e.g. **at** in the word **cat**)

Root word

A word, usually of Latin origin, that may or may not stand alone, but can be combined with **affixes** to create families of words (e.g. **act** → **react**, **deactivate**, **active**)

S

Scaffolding

Refers to the support that is given to students in order for them to arrive at the correct answer. This support may occur as immediate, specific feedback that a teacher offers during student practice. For instance, the assistance the teacher offers may include giving encouragement or cues, breaking the problem down into smaller steps, using a graphic organiser, or providing an example. Scaffolding may be embedded in the features of the instructional design such as starting with simpler skills and building progressively to more difficult skills. Providing the student temporary instructional support assists them in achieving what they could not otherwise have done alone

Schwa

An unexpected or indistinct vowel sound where the vowel is reduced, sometimes sounding like short /i/ or short /u/; it occurs in an unstressed syllable (e.g. **pilot**, **extra**)

Segmenting

The process of breaking down a word into the individual sounds/ syllables that it is made up of

Sight word

High frequency, commonly used words that do not follow spelling rules/decoding strategies and must be memorised as a whole and recognized by sight for automatic decoding within a text

Soft C Rule

A letter **c** in a word that sounds like /s/. This occurs when the **c** is followed by **e**, **i**, or **y** sounds (e.g. **nice**, **circus**, **fancy**)

Soft G Rule

A letter **g** in a word that sounds like /j/. This occurs when the **g** followed by **e**, **i**, or **y** (e.g. **George**, **giraffe**, **gym**)

Sound cards

Colour-coded flashcards used in the *Wilson Reading Program* displaying digraphs, trigraphs, welded sounds, consonants, short vowels, long vowels, open vowels, r-controlled vowels, vowel diagraphs, diphthongs, and additional sounds (tion, sion, que, ti, ci, tu, ture) printed on one side, and keywords, pronunciation, and sub-step codes printed on the reverse

Stretching words

The process of extending the sounds in a word by slowly stretching them out

Subvocalizing

Verbalising words in your head while reading

Suffix

A spelling pattern added to the end of a word that changes its meaning (e.g. pick → picked, picking, picks)

Syllable

A unit of pronunciation with only one vowel sound, which may or may not contain surrounding consonants, and that forms the whole or a part of a word; the syllables in **picnic** are “pic” and “nic”

Syllable division

The process of dividing multisyllabic words into their individual syllable components, by applying the rules that govern each of the six **syllable types**

Syllable exceptions

Syllables that look like a certain **syllable type**, but in fact do not follow the rule that governs that type of syllable

Syllable exception types

- 1) Closed Syllable exceptions** – Closed syllable welded sounds where the vowel makes a long sound instead of a short sound (e.g. **ild** (wild), **ind** (kind), **old** (told), **olt** (bolt), **ost** (host))
- 2) Vowel-Consonant-E exception (VCE exception)** – “**ive**”, normally the **i** would make a long sound, but since no English word ends in a **v**, many times the **i** stays short (e.g. **give**, **live**)
- 3) Open Syllable exception** – **a** makes an /**ǔ**/ sound instead of /**ā**/ in an unstressed open syllable; e.g. when the **a** is placed at either the beginning or ending of a word like in **Alaska**; **i** says the short /**ǔ**/ or /**ī**/ sounds instead of the long /**ī**/ sound in an unstressed open syllable (e.g. when the **i** is placed in the middle of the word as in **compliment**)
- 4) Consonant -L-E Syllable exception** – When this syllable has an **s**, the **t** is silent with the **e** (e.g. **-stle** as in **castle** and **whistle**)

5) R-Controlled Syllable exception – A vowel followed by a **double r** often changes its sound (e.g. Larry, ferry)

6) Vowel Digraph/Diphthong Syllable exception – Two vowels together are not always a vowel digraph or diphthong (e.g. sometimes they are divided for syllabication as in vi ol in, mo sa ic, cre ate)

Syllable scooping

A strategy to break multisyllabic words into smaller units/syllables; similar to clapping syllables; however, this is done with a pencil and students mark syllable division by making a curved line under each syllable in the word (e.g. mis take)

Syllable types

Closed Syllable – ends with a consonant and only has one vowel that makes a ‘short’ sound; e.g. cup, sat, trip, met

Vowel-Consonant-E Syllable – has a vowel-consonant-e combination where the ‘e’ is silent and the first vowel makes a ‘long’ sound; e.g. tape, cone, side, cube

Open Syllable – ends with a single vowel (or the vowel may be the only letter in the syllable) and the vowel makes a long sound; e.g. I, be, shy

Consonant-le Syllable – contains a consonant-le at the end of the word, where the ‘e’ is silent and only the consonant and the ‘l’ are pronounced; e.g. ladle, little, trouble

R-Controlled Syllable – contains a vowel combined with an **r (ar, er, ir, or, ur)** where the vowel’s sound is neither long nor short; e.g. start, firm, torn, turn

Vowel Digraph/Diphthong “D” Syllable – contains a diphthong or vowel digraph; e.g. seat, feel, eight, new, town

T

Tapping (sound tapping/tapping out words)

The act of touching thumb to forefinger when saying the first sound of a word, touching thumb to the middle finger when saying the second sound, etc. When all of the sounds have been assigned to fingers, the thumb is swiped back over the fingers in one motion to say the entire word as a single unit. This is a tactile practice that helps students with sequencing letter sounds, and matching sounds to letters and/or groups of letters. As students progress through the **Wilson Reading Program**, single sounds are replaced by syllables to read multisyllabic words

Tracking

A reading process where beginner readers use a finger to signal their eyes to move left to right and keep their place while reading word by word; this kinesthetic behaviour will eventually become automatic as readers progress until they are able to track text using their eyes only

Trigraph

V A three-letter combination that makes only one sound (e.g. **dge, tch**)

Vowel digraph

A combination of two vowels that together make one sound (e.g. **au, ie, oa**)

Vowel team

A spelling pattern that uses two or more letters to represent a single vowel sound

W

Welded sounds

Groups of letters that act as a singular sound since they cannot be easily divided into their individual sounds (e.g. **am, an, ing, ang, all, ink, and onk**)

Wilson Reading System/ Wilson Program

A comprehensive, direct instruction program that teaches the structure of language and words using a step-by-step, multisensory approach. The program addresses decoding, encoding, oral reading fluency, and comprehension

Word cards

Wilson flashcards printed with single words that exemplify the learned skills in each sub-step; word cards for a given step may also include rules learned in previous sub-steps

Word families

Words that have the same vowel and ending letters and rhyme with each other (e.g. the “**at**” family: **cat, bat, fat, sat, etc.**)

Words Their Way

A progressive, hands-on program that teaches spelling with a focus on sounds, patterns, and meaning; it requires students to study words by examining, manipulating, comparing, and categorising them

Y

Y as a vowel rule

At the end of a one-syllable word, **y** makes the long /i/ sound as in **sky** or **try**; at the end of a two or more syllable word, **y** usually makes the long /e/ sound as in **story** or **ebony**

Y to I rule

If a word ends in a consonant plus **y**, the **y** is changed to an **i** when the word is made plural.

Yak Pack Comics & Phonics

A series of comic books that targets learning different sound patterns using decodable words and simple sight words in sentences

Yak Pack Sight Word Comics

A series of comic books that practises 100 sight words, by frequency, in sentences

Writing and Grammar Glossary

5 Star Sentences checklist

A post-writing checklist used to proofread written work; the following items are checked within each sentence:

- 1) Sentences and proper nouns start with a capital
- 2) Lowercase letters for the rest
- 3) Ends with a period
- 4) Spaces between words
- 5) Underlined and tried to fix any words unsure about

A

APE

A part of the body paragraphs of an essay that introduces and proves one sub-argument. The acronym **APE** stands for: **A**rgument, **P**roof, and **E**xplanation. A body paragraph may include one to three APES

B

Body paragraph/ body section

A section of an essay that proves one sub-argument. Most essays have three body sections. These are sometimes referred to as body paragraphs; however one body section may include several paragraphs

BOWIE

In the *Power Paragraphs* program, the writing steps students follow to construct a paragraph from beginning to end. The acronym **BOWIE** stands for: **B**rainstorm, **O**rganise, **W**rite, **I**mprove, **E**dit

C

Centre starting capital

Capital letters that are written by starting near their top-centre

Complex sentence

A sentence comprised of one **simple sentence**, followed by a **grabbing word** and a **simple sentence** that gives a detail about it

Compound sentence

A sentence comprised of two **simple sentences** connected by a comma and a **joining word**

Corner starting capital

Capital letters that are written by starting near their top corner

COPS

A post-writing checklist used to proofread written work: **C** is for Capitals, **O** is for Overall Presentation, **P** is for Punctuation, **S** is for Spelling

D

Dance Mat

An online typing program that teaches touch-typing through progressive lessons divided into four levels

Directional sentence

A sentence that comes immediately after a thesis statement in an essay introduction. It provides a roadmap of the route the essay will take by listing the sub-arguments in the order they will be made

Diver letters

In the *Handwriting Without Tears* program, letters that begin with a diving motion, starting at the top line and moving straight down to, or past, the bottom line. The Diver letters are: **p, r, n, m, h, b**

E

Elements of fiction/story elements

Literary elements that all narrative texts possess; these include: setting, characters, plot, conflict, narrational point of view, and theme

Expository writing (*Power Writing Level 2 only*)

A style of writing with the intent to inform, explain, describe, or define a subject

F

Frog Jump capitals

In the *Handwriting Without Tears* program, denotes capital letters where the student must start at the top line, draw a straight line down to the bottom, and then 'Frog Jump' their pencil back up to the top line to continue the letter. Frog Jump Capitals include: **F, E, D, P, B, R, N, and M**

G

Grabbing phrase

Also known as a dependent clause, it consists of a **grabbing word** and a **simple sentence** that together form part of a **complex sentence** (e.g. I like to have a hearty breakfast **before I go to work.**)

Grabbing word

A word, otherwise known as a subordinating conjunction, that introduces a grabbing phrase, also known as a dependent clause (e.g. **after, because, when**)

Graphic/thinking organiser

A diagram used to visually organise thoughts and represent ideas prior to writing a draft

H

Handwriting Without Tears

A structured program designed to teach printing or cursive handwriting through multisensory tools and strategies

Helicopter letters

In the *Handwriting Without Tears* program, letters that involve making a 'Magic C' and then moving from the bottom line to the top line, and back down like a helicopter taking off and landing. Helicopter letters include: **d, a, g, and q**

Higher order thinking

Skills involving analysis, evaluation, and synthesis (creation of new knowledge), that require different learning and teaching methods than the learning of facts and concepts

Homograph

Words that are spelled the same way, but have different meanings and pronunciations (e.g. **desert** can serve as a noun (i.e. the **desert**), or as a verb (i.e. to **desert**))

Homonym

A word that has multiple meanings, and can change its part of speech (e.g. "the spruce tree" (noun) vs. "to spruce up" (verb))

Homophone

Words that sound the same but have different meanings and spellings (e.g. **their/there/they're** or **effect/affect**)

I

Inference

A conclusion reached on the basis of evidence and deductive reasoning

J

Joining word (FANBOYS)

A word, otherwise known as a coordinating conjunction, that connects two words, or **simple sentences** in a **compound sentence**. The seven joining words can be remembered by the acronym **FANBOYS** which stands for: **F**or, **A**nd, **N**or, **B**ut, **O**r, **Y**et, and **S**o

M

Magic C letters

A term used in the *Handwriting Without Tears* program to describe letters of the alphabet that are formed by beginning with the shape of a 'c'. The Magic C letters are: **o, g, a, d, and q**

O

Open-ended question

An unstructured question, usually beginning in “how”, “what”, “when”, “where”, and “why”, in which possible answers are not suggested, and the respondent must answer in his or her own words; these answers require additional information, opinions, evidence, explanations, etc.

P

Parts of speech

Traditional grammar classifies words into categories based on their function. The 8 parts of speech are: nouns, pronouns, verbs, adjectives, adverbs, prepositions, interjections, and conjunctions

Persuasive Power

A writing program designed to solidify knowledge of persuasive paragraph structure and the writing process

POW! strategy

A strategy used to turn a **power 1 sentence** into a **power 1 conclusion**. The acronym **POW** stands for: **P**ut in strategic synonyms, **O**rders your sentence differently, **W**rite something new

Power

A designation of the different components required to write a successful paragraph, each power having a different purpose

Power 1

The focus, main idea, or topic of the paragraph

Power 1 conclusion

The final sentence of a paragraph that restates and rephrases the **power 1 sentence**

Power 1 sentence

A sentence introducing the topic that begins a paragraph

Power 2

The major supporting ideas for the **power 1**

Power 2 sentence

A sentence that provides detail about the **power 1**

Power 3

Details, examples, and explanations for each **power 2**

Power 3 sentence

A sentence that provides additional information about the **power 2** it follows, in the form of details, an example, or an explanation

Power 1 sentence starters

Six different ways of beginning a paragraph including starting with the **power 1**, an -ing verb, “I,” an amount, a time or place, or “if”

Power Essays

A collection of essay-writing programs that guide students through the process of constructing a persuasive paper from start to finish. Programs under The Essay Coach umbrella include: The *Opinion Essay* program, The *Literary Essay* program, The *Research Essay* program, and the *Application Essay* program

Power Paragraphs

A writing program that guides students through the writing process and the mechanics of constructing a detailed paragraph about one idea, including a **power 1 sentence**, three or more **power 2 sentences**, three or more **power 3 sentences**, and a **power 1 conclusion** sentence

Power Pencils

A handwriting program based on *Handwriting Without Tears*

Power Sentences

A writing program that guides students through the mechanics of constructing complete and detailed sentences of varying structures

Power(ing) up

The process of improving a sentence by adding descriptive words and parts of speech

Prepositional phrase

The part of a sentence that begins with a preposition and tells where something is happening (e.g. The cat is eating **in the kitchen.**)

Q

QWERTY

A typing program designed to instill proper typing techniques

QWERTY Plus

A typing program designed to instill proper typing techniques as well as effective note-taking strategies

S

Signal words

A word or phrase, otherwise known as a transition word/phrase, that helps the reader follow the direction of the writer's thoughts and varies according to the accompanying **power** or purpose of the writer

Simple sentence

A sentence that has a **who/what** and only one verb

Stretch a Sentence

A writing strategy for adding more details to sentences by asking who, what, where, when, why, and how

T

Thesis statement

A sentence or sentences providing the overall argument of an essay; usually found in the introduction of the paper

TiP ToPS

An acronym that, in story-writing, explains when to start a new paragraph, including when there is a change in **T**ime, **P**lace, **T**opic, **P**erson, and **S**peaker

Tow Truck letters

A term used in the *Handwriting Without Tears* cursive program to denote lower-case letters that do not end on the line and are connected to other letters from their top. The tow truck letters are: **o**, **w**, **b**, and **v**

Typing Agent

An online typing software designed to build typing skills through a progressive set of lessons encompassed in ten units

W

What about it

The part of a sentence, otherwise known as the predicate, which gives information about the *who/what* (e.g. The cat **is eating**.)

Who/what

The part of a sentence, otherwise known as the subject, which tells who or what the sentence is about (e.g. **The cat** is eating.)

Writing process

The writing steps students follow to construct any piece of writing from beginning to end. The steps are: brainstorm, organise, write, revise, edit

Math Glossary

A

Addition strategies

1) Counting up/Counting on

Start with the bigger number and count up the amount of the smaller number

2) Ten Partners/Ten Pairs

Numbers that add to 10 (e.g. 9+1, 8+2, 7+3, 6+4, 5+5)

3) Doubles

The sum of a number added to itself; double facts must be memorised as other strategies build on these facts

4) Doubles + 1

Used for questions that contain consecutive numbers (i.e. neighbours on the number line); double the lower number, and then add one more to the answer

5) Doubles + 2

Used for questions that contain numbers that are 2 apart on the number line; double the lower number then add 2 to the answer

6) The 10 Trick

When adding a single digit number to 10, the number added replaces the zero in the number 10

7) The 9 Trick

Used for adding single digit numbers to 9; decrease the number added by one, and then put a one in front of it

8) The 8 Trick

Used for adding single digit numbers to 8; decrease the number added by two, and then put a one in front of it

Altitude

A line that is perpendicular to one side of a triangle and passes through the opposite vertex

B

Base Ten Blocks

Mathematical 'manipulatives' that represent single units and groups of ten, one hundred, and one thousand; used to teach and express concepts such as place value, addition, subtraction, number sense, and counting

BEDMAS (sometimes **PEMDAS**)

An acronym listing the order in which arithmetic operations should be performed: **B**rackets, **E**xponents, **D**ivision and **M**ultiplication, **A**ddition and **S**ubtraction

C

Circle Method – long division

A strategy to help students remember the process for solving long division questions. Following the four steps of division: **divide**, **multiply**, **subtract**, and **bring down**, the student visualises or draws a large circle around the question and writes one of the letters at the top (D), left (M), bottom (S), and right (B) of the circle. These letters, as well as the circle itself, serve as visual cues for which step comes next in the cycle when completing long division questions

Clue word

In a math word problem, a word that may indicate to the student what operation(s) to use in order to solve the problem (e.g. **total**, **less**, **double**, **each**)

Coefficient

A number that multiplies a variable (e.g. **3** in $3x$)

Completing the square

A procedure that turns a quadratic expression into a special form

Coordinate pair

A pair of numbers (x, y) that specifies a location compared to the x-axis and y-axis

CUBES

A strategy used to break down and solve word problems in math. The acronym **CUBES** stands for: **C**ircle the key numbers, **U**nderline the question, **B**ox any **clue words**, **E**valuate the steps I need to take, and **S**olve and **C**heck

D

Derivative

A tool that describes the rate of change of a function

Domain

The collection of x-values that a relation includes

E

Expanding

Multiplying expressions in brackets together; the reverse of factoring

F

Factoring

Putting an expression into brackets; the reverse of expanding

FOIL

A common procedure for multiplying quadratic expressions

Fraction strips

A manipulative comprised of rectangular pieces of varying sizes that represent different parts of a whole, and show visually the relationship between fractions

G

GRASP strategy

A method for solving word problems in five steps: determine what is **G**iven, determine what is **R**equired, **A**nalyse, **S**olve, then **P**araphrase the answer to respond to the question directly

J

Judy Clock

An analog clock, with hands that can be manipulated, used to learn to read the time

JUMP Math

A research-based, curriculum aligned, numeracy program for Grades 1-8 that helps students develop mathematical skills through scaffolded, multi-sensory lessons

L

Like terms

Two or more terms that include the same variables and exponents

M

Manipulatives

Physical items that support hands-on learning; used to reinforce knowledge and understanding

Math Overview Curriculum (Grades 7-11)

A suite of programs designed for students to review key concepts in the Ontario mathematics curriculum

Mathemagics

A program which is designed to develop numeracy skills based on the Number Sense strand of Ontario's Grade 2 mathematics curriculum

Mod Math

An iPad app, designed for students with dyslexia and dysgraphia, that allows them to do math by providing virtual graph paper, a numbers and operations keyboard, and the option of saving and sharing completed work

Multiplication strategies

1) Double the Double

Used for the 4 times table; multiply the number by 2 first, then double the answer

2) The 5 Pattern

An even number multiplied by five will always end in 0; an odd number multiplied by five will always end in a 5

3) Double the Triple

Used for the 6 times table; multiply the number by 3 first, then double the answer

4) The Finger Trick

Used for the 9 times table up to 9×10 ; starting with the pinky finger of the left hand as the number one, put down the finger number that is being multiplied by 9 – the number of fingers to the left of this finger represent the ten's digit of the answer, and the fingers to the right represent the ones digit

5) The Ten Trick

When multiplying a whole number by 10, add a zero to the end of the number

N

Numeration

The process of naming, writing, and calculating numbers

O

Operation

Any mathematical procedure, such as addition, subtraction, multiplication or division, in which one or more numbers or quantities are operated upon according to specific rules

P

Perpendicular bisector

A line that is perpendicular to one side of a triangle and passes through its midpoint

Place value

The value of a digit which depends on its position in a number (e.g. in the number **23**, the **2** is in the **tens** position; this means that its value is **20**)

Plugging in

The process of replacing a variable with a number

Polynomial

An expression containing whole number exponents of any size

Power Solvers (Junior and Senior)

A pair of strategy-based programs designed to boost students' confidence with mathematical word problems

Q

Quadratic

An expression containing a highest exponent of '2' (e.g. x^2)

R

Range

The collection of y-values that a relation includes

S

SOHCAHTOA (sometimes SOH CAH TOA)

A mnemonic device used to recall the meanings of basic trigonometric ratios

Substituting

The process of replacing one expression with another

Substitution

The process of replacing one expression with another

Subtraction strategies

1) Counting Back

Used to subtract 1, 2, or 3 from a number. Start with the larger number and count backwards

2) Counting Up

Start with the smaller number and count up to the larger one

3) Doubles Subtraction

Students can use their knowledge of addition doubles (e.g. $9+9=18$) and use the inverse to answer subtraction questions (e.g. $18-9=9$)

4) 10 Partners Subtraction

Students can use their knowledge of Ten Partners to complete subtraction questions (e.g. $2+8=10$ so $10-8=2$)

T

Term

A combination of numbers and variables separated from others by a plus or minus sign

Transformations

Shifts, stretches, or flips applied to a function by changing its parameters

Transforming

The process of shifting, stretching, or flipping a function by changing its parameters

Trigonometric (abbrev. **trig**)

The branch of math that studies the sides and angles of triangles

Trigonometry (abbrev. **trig**)

The branch of math that studies the sides and angles of triangles

V

Variable

A letter that can be assigned various numerical values (e.g., $x = 3$ or $x = 5$)

Vector

A mathematical object that includes both a magnitude and direction, most easily understood as an “arrow”

X

x-intercept

The point(s) at which a function crosses the x-axis

Y

y-intercept

The point at which a function crosses the y-axis

Assistive Technology and Executive Functions Glossary

D

Dictation

A feature, in word processors, that records spoken words in writing

Dragon Naturally Speaking

A speech recognition software that captures what a student says and transcribes it into text that can also be read back to the student for editing purposes

I

Inspiration Maps

An app for making study diagrams, brainstorm maps, graphic organisers, and outlines

P

Power Planners (Junior and Senior)

A program designed for students to strengthen their executive functioning skills. Students get to know themselves and their organisational styles, and explore a variety of tools and strategies surrounding executive functioning

R

Read-back feature

A feature, in word processors, that reads text aloud; also known as **text-to-speech**

S

SMART goals

A strategy to help students set realistic goals and create a detailed plan to achieve them. The acronym **SMART** stands for: **S**pecific, **M**easurable, **A**ttainable, **R**elevant, and **T**ime-bound

T

Texthelp Read&Write

A customizable literacy support software containing reading, writing, research, and study skill tools that help all students access the curriculum. Applications of *Texthelp Read&Write* are also available for tablets, Google Chrome, Microsoft Edge, Windows, and Macs

U

University Readiness

A program designed to prepare students for the transition to post-secondary education. Participants practice self-reflection and evaluation to arrive at an overall organisation system that works for them

Test Preparation Glossary

S

SAT Preparation

Extended strategy and skill development in each section of the SAT test, taught in either a 1-to-1 or group class setting

SSAT Preparation

Extended strategy and skill development in each section of the SSAT test, taught in either a 1-to-1 or group class setting