
Getting Ready to Read: Extending Vocabulary – Creating a Word Wall

MATHEMATICS Grades 10-12

Secondary students benefit from clues and cues as they encounter new mathematical concepts and vocabulary. A word wall displays key vocabulary words for a unit of study, on a bulletin board or chalk board.

Purpose

- To provide visual clues and cues for the students when learning or reviewing mathematics vocabulary for a unit of study.

Payoff

Students will:

- have a visual reference for vocabulary in the unit.
- be able to review the words each day.
- improve their comprehension and spelling of key words.

Tips and Resources

- Consider posting certain words for longer periods (e.g., words that occur frequently in the unit, words that are difficult to spell, and words like 'justify' that are used in all strands of mathematics).
- Have students refer to the word wall to check their spelling and understanding of words.
- Include symbols on the word wall.

(See Student/Teacher Resource, *The Frayer Model*).

Further Support

- Adding pictures can be particularly beneficial for English Language Learners and struggling readers.
- Provide each student with a place to record a copy of the word wall. It could be a special section in a notebook, or on recipe cards.

Getting Ready to Read: Extending Vocabulary – Creating a Word Wall

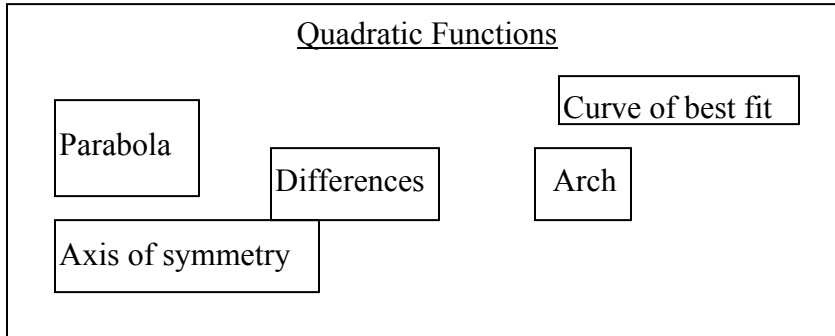
MATHEMATICS Grades 10-12

Notes

What teachers do	What students do
Before <ul style="list-style-type: none"> Preview a unit for key symbols and words. Make a list of words/symbols you anticipate students will identify as being unfamiliar. Plan a place in the classroom to house the word wall: it will grow as the semester progresses and should not be moved once established. Prepare strips of card stock or recipe cards for your word wall items. Help students to skim and scan sections of the text that are to be studied. 	<ul style="list-style-type: none"> Scan the section of text for unfamiliar words and symbols.
During <ul style="list-style-type: none"> Have students independently skim and scan sections for unfamiliar words and symbols. Have students record their words one per recipe card. Have students share their findings with the rest of the class. Have students work in small groups to compare recipe cards and compile a master collection. Have students post the collection somewhere in the room. 	<ul style="list-style-type: none"> Scan the text for symbols and words that are unfamiliar. Compare lists. Make a master list. Post list.
After <ul style="list-style-type: none"> Discuss the meaning of the words with the students. Have students copy out the collection into their books. Have students look up the unfamiliar words. Students will add words as the learning progresses. 	<ul style="list-style-type: none"> Record their personal lists and look up words that are unfamiliar.

Getting Ready to Read: Extending Vocabulary – Creating a Word Wall

MATHEMATICS Grades 10 Applied



Possible Word Wall Vocabulary:

Functions:

Capacity, ordered pair of co-ordinates, dependent variable, independent variable, table of values, function, slope y-intercept form, diameter, graphical model, coordinates, x-axis, y-axis, linear function, slope, y-intercept, x-intercept, first differences, point slope form of an equation, piecewise linear functions.

Linear Systems:

Intercept, solving by substitution, solving by graphing, solving by elimination.

Proportional Reasoning:

Proportional relationship, unit price, ratio, proportion, scale diagram, drawing size, actual size, stretched vertically, stretched horizontally.

Similar Triangles and Trigonometry:

Inaccessible Heights, triangle, acute triangle, obtuse triangle, Isosceles triangle, equilateral triangle, right triangle, similar triangles, sss, sas, asa, congruent, sine ratio, cosine ratio, tangent ratio.

Quadratic Functions:

Parabola, quadratic function, curve of best fit, arch, differences, axis of symmetry, zeros of a function.

From Algebra to Quadratics:

Like terms, distributive law, simplify, expand, collect like terms, evaluate, monomial, binomial, trinomial, polynomial, factoring, common factors, difference of squares, trinomial where a equals 1.

Analysing Quadratic Functions:

Transformations, vertex, direction of opening, congruent, standard form, vertex form, roots.

