

2015-16 TEACHING TIPS FROM 2016 PAWS TEACHER ITEM REVIEW

ELA PAWS Teaching Tips — The educators at our PAWS Item Review (July 2015) felt the following were important to stress to teachers in preparation for this school year. These topics are found in the standards and should be familiar to students.

All Grades: Model reading a passage, looking at the questions and GOING BACK to the text

Vocabulary / Terminology on PAWS — Use the specific vocabulary / language of the standards. Test designers often refer to language used in the standards when writing items. So, it is good practice to use and encourage this language with your students. For example, if a Language Art's standard employs the literary term "drama", use this word as frequently as "play", so students are familiar when they see the word "drama" on a test form.

Grades 3-4

- Points of View – compare the differences between first person and third person
- Understand the differences between a line and a stanza
- Know the elements of figurative language
- Use quotation marks around titles and headings

Grades 5-6

- Review Story Map Vocabulary/Terms: setting, rising actions, climax, falling action, plot, conflict/problem, and resolution
- Look at Text Structure within a paragraph and across an entire text: Cause/Effect, Problem/Solution, Compare/Contrast, Order of Importance, Review of Process, (Spatial) Descriptive, Question/Answer, and Definition/Meaning
- Read, discuss and compare paired texts.
- Practice sequencing/ordering events after reading a text
- With poetry, use terms such as: symbolism, repetition, idiom, simile, theme, tone
- Use the terms "theme" and "message" interchangeably
- Interchange the terms "main idea" and "central idea" when teaching
- Study the use and meaning of idioms
- Study Latin pre, roots and suffixes
- Practice using/reading dictionary entries for both definitions and parts of speech

Grades 7-8

- Practice close reading of passages and referring back to text
- Read questions carefully
- Understand vocabulary words in different context
- Increase text complexity used in the classroom

2015 Math Teaching Tips (Grades 3-5)

Math Vocabulary — The educators at the PAWS Item Review (July 2015) continue to encourage using and building students' understanding of the vocabulary words listed below in preparation for the assessment. These items are found in the standards and should be familiar to students.

3rd Grade Vocabulary	4th Grade Vocabulary	5th Grade Vocabulary
<ul style="list-style-type: none"> Terms of 4 operations (sum, difference, product, quotient) Expression / Equation Terms (the 3rd term in the pattern) Division signs (all including fraction bar) Multiple of vs. multiply by Divisible by \square = a number (variable) 3.OA.4 	<ul style="list-style-type: none"> Divisor, Dividend, Quotient, Product Inequality Place Value Multiplicative Equation Term (the 4th term in the pattern) Term number (the number that is the 4th term in the pattern) 	<ul style="list-style-type: none"> Parentheses (), Braces { }, & Brackets [] Divisor, Dividend, Quotient, Product

Math Concepts — The educators at our PAWS Item Review (July 2014 & 2015) wanted to stress teaching the following concepts in mathematics. It is also recommended to look at the standards in the grade prior to the one you are teaching and to look at the front material at the beginning of the standards' document including the 8 Mathematical Practices.

3rd Grade Concepts	4th Grade Concepts	5th Grade Concepts
<ul style="list-style-type: none"> Number Sentence & Equation (can be used interchangeably) Know multiplication facts (x12) within 100 Know how to add with both vertical alignment (seen to the right) and horizontal alignment $\begin{array}{r} 35 \\ + 15 \\ \hline 50 \end{array}$ (35 + 15 = 50) 3.NF.1—items can be set up with fractions that are not a whole (< 1) 3.NF.2—Fractions on a number line are not bound between 0 and 1. (i.e. 2-3/4) Help students understand that a square or rectangle can be partitioned into 2 equal triangles. (3.G.2) Use number line diagrams to measure time intervals and elapsed time Know and understand all categories of shapes as given in the standards Introduce questions that evaluate 2 different methods for solving a problem and include options for choosing method 1, method 2, neither, or both. Understand the degrees of an angle inside a circle or arc From a number line, be able to recognize mixed numbers 3.MD.6—give experience with 'improvised units' (hand spans, stapler lengths...) 	<ul style="list-style-type: none"> Know the metric and standard units of measurement Students should know the equivalents for cups, oz., lbs., qts, gal., in., feet., yards... Know the difference between area and perimeter; know what they mean, not just how to find Be fluent in the standard algorithm for adding and subtracting Understand 'turns through' in 4.MD.5b (1/360 of) 	<ul style="list-style-type: none"> Teach multiplication of fractions in a vertical manner Work with students on tables and teach them how to organize and read information. Help students understand that the following are two formats that say the same thing: $\begin{array}{r} 12 - 5 \\ \hline 5 \times 4 \end{array} \quad \begin{array}{r} 12 - 5 \\ 20 \quad 20 \end{array}$ Able to multiply 4 digits by 4 digits Familiar with area model Know the metric and standard units of measurement Students should know the equivalents for cups, oz., lbs., qts, gal., in., feet., yds... Be familiar with justification with 'because reasoning' (e.g. 14 because ...). Students need to understand the justification must also be correct, not just the answer. For place value, emphasize 10 times larger and 1/10 as large instead of multiply by 10 and divide by 10.

2015 Math Teaching Tips (Grades 6-8)

Math Vocabulary — The educators at the PAWS Item Review (July 2015) continue to encourage using and building students' understanding of the vocabulary words listed below in preparation for the assessment. These items are found in the standards and should be familiar to students.

6th Grade Vocabulary	7th Grade Vocabulary	8th Grade Vocabulary
<ul style="list-style-type: none"> • Divisor, Dividend, Quotient, Product • Spent, Deposit, Withdraw, Earned, Donated... • Mean & Median • Interquartile Range (IQR) • Mean Absolute Deviation (MAD) • Variability • Statistical 	<ul style="list-style-type: none"> • Proportional Relationships vs Linear Relationships • Variability • Quotients 	<ul style="list-style-type: none"> • Mean Absolute Deviation (MAD) • Absolute Deviation • Initial Value • Pattern of Association • Bivariate Data

Math Concepts — The educators at our PAWS Item Review (July 2014 & 2015) wanted to stress teaching the following concepts in mathematics. It is also recommended to look at the standards in the grade prior to the one you are teaching and to look at the front material at the beginning of the standards' document including the 8 Mathematical Practices.

6th Grade Concepts	7th Grade Concepts	8th Grade Concepts
<ul style="list-style-type: none"> • 6.NS.5—practice with real-world application • Focus more on Statistics and Probability domain • Students need more experience with box & whisker plots and need to understand the meanings • Know how to find the middle 50% (IQR) Interquartile Range • Give experience with interpreting a graph of constant speed • Practice reading all the way through and noting the possibility of multiple answers • Incorporate your SP standards into your other calculation standards so students have experience with this earlier in the year (low scores in this domain) • Know that the opposite of 0 is 0 • Kids need to be able to use number sense to solve (answer) some questions without calculations • Kids need to understand that an inequality has an infinite number of solutions while an equation has only one solution 	<ul style="list-style-type: none"> • $-(a/b) = (?a/?b)$ determine sign placement to make this true • Percent decrease • 7.EE.2 • Factoring and expanding in the same problem • Area models with equivalent expressions • Solution set $\{ \}$ (learned in 6th gr.) • Constructions • Quantities (quantities can be both variables and constants) • Problems involving decimals and fractions in them • Factoring (pulling out the negative) 	<ul style="list-style-type: none"> • Add & subtract with scientific notation • Solution of a system of equations (no solution, infinite solution, zero solution) • Quadratic functions (more conceptual than use) • Know sphere & cone formulas • Increasing & decreasing functions • $2 < x < 5$ etc.... • Process of taking a root and estimating out to 2 decimal places • Cube roots • Standard form for a system of equations