



STEM SCHOOL

HIGHLANDS RANCH

Never Stop Innovating

SBL Student Forum

February 22nd

What if...

- You could describe precisely what you need to know and to do to succeed in class, at the beginning of a unit?
- You could identify the connection between what you learn and the grade you receive?
- Everything done in the classroom is clearly connected to what you need to learn and do?
- You had multiple opportunities and ways to demonstrate what you know and understand?

What is Standard based Learning?

Standards Based Learning (SBL) is a system in which teachers give feedback to students about their proficiency on a set of defined standards and schools report students' performance on those grade-level standards. It is a system of assessing and reporting that describes student progress in relation to standards. In a standards-based system, a student can demonstrate mastery of a set of standards and move immediately to a more challenging set of standards

Why Standards Based Learning?

- Provides targeted feedback
- Aligned classes
- Provides greater accuracy in reporting how you are progressing on standards
- Grades are not dependent on high stakes assessments but rather on a body of evidence

What Will This Look Like in the Classroom?

- At the beginning of a unit, you will receive a student friendly proficiency scale. This will tell you exactly what you need to be proficient on that standard or in that unit.
- Throughout the unit you will receive feedback on your daily classwork and homework assignments. This feedback will help you be more successful on the items that your teacher will collect as a body of evidence.
- Your grade will be based on a body of evidence made up of classwork assignments, projects and traditional assessments, however these grades will occur once you have had an opportunity for practice and feedback.

Standard: HS.A-APR.A. Arithmetic with Polynomials & Rational Expressions: Perform arithmetic operations on polynomials.

Topic: Adding and Subtracting Polynomial Expressions (Algebra 1)

Grade: HS Algebra I

4.0 The student could:

- Develop a strategy for simplifying polynomials (for example, first distribute any factors or negative signs across the polynomials to which they apply, then rewrite the expression with like terms next to each other, finally add and subtract like terms and write the final form of the expression with terms in order of descending degree).

3.0 The student will:

APR.A.1- Explain that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials. (for example, Loading...).

(for example, $(x^3 + 3x - 6) + (-2x^2 + x - 2) - (3x - 4) = x^3 - 2x^2 + x - 4$).

2.0 The student will:

- Understand the following vocabulary: *polynomial, name, degree, like terms* and *unlike terms*
- Identify like terms in a polynomial.
- Use the correct order of operations when simplifying polynomials.
- Write polynomial expressions in standard form (in order of descending degree).

The student will:

- Understand the following vocabulary: *distributive property* and *polynomial*
- Add two polynomials. $(5x^2 + 8x - 3) + (2x^2 - 7x + 13x) = 7x^2 + 14x - 3$.
- Subtract two polynomials. $(16x + 14) - (3x^2 + x - 9) = -3x^2 + 15x + 23$.

Left Margin

Distribute the negative sign across the entire polynomial to which it applies when subtracting polynomials. $(16x + 14) - (3x^2 + x - 9) = 16x + 14 - 3x^2 - x + 9$.

1.0 With help, partial success at score 2.0 content and score 3.0 content

Learning Goal: How to create equations in two or more variables to represent relationships between quantities and graph equations

Level 2: I'm taking steps towards grade level expectations.

(must be able to demonstrate all 2.0 descriptors to move to 3.0)



- I can understand the following vocabulary: *linear equation, point, scale, slope-intercept form, standard form, and point-slope form, vertex, absolute minimum, absolute maximum, decreasing interval, increasing interval, and line of symmetry, boundary line, linear inequality, and solution set*
- I can state that the graph of an equation is the set of all its solutions plotted in the coordinate plane.
- I can state that every term in a linear equation is either a constant or a constant times a variable raised to the first power.
- I can identify slope, y-intercept and rate of change of a linear function given in different forms.
- I can use an appropriate scale when plotting linear equations on a coordinate plane.
- I can graph a linear equation by given the y-intercept and the slope to find another point on the line. For example, convert a linear equation to slope-intercept form, plot the y-intercept, and then use the slope to plot another point on the line.
- I can identify the maximum or minimum value and the slope of the lines to the left and right of the vertex to graph an absolute value function.
- I can label key features on the graph of a function. For example, intercepts, increasing intervals, decreasing intervals, absolute maximum, absolute minimum, relative maximums, relative minimums, and symmetries.
- I can state that the graph of an inequality is the set of all its solutions plotted in the coordinate plane

Level 3: I can meet grade level expectations.



- I can create equations in two or more variables to represent relationships between quantities and graph equations on coordinate axes with labels and scales
- I can write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function
- I can explain that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line).

Level 4: I have all the 2s and 3s mastered and am ready for more.

- I can test the idea that all points that satisfy a linear equation or inequality fall within its solution set when graphed on a coordinate plane (for example, graph points that do and do not algebraically satisfy a linear equation to verify that all points that satisfy the equation algebraically also fall on the line formed when it is graphed in the coordinate

Final Grade Reporting

- K-8 will be reporting out final grades as a 4,3,2,1
- 9-12 will report convert final grades using A-F

Final Grade

Standard

Analyze traditional and contemporary literary texts with scrutiny and comparison of literary elements (9/10 Reading for All Purposes 1)

2, 3, 2, 3, 3, 3, 4= **Final grade= 3**

Most frequent score.

Final Category Grade

Reading S1 - 3

Reading S2 - 2

Reading S3 - 3

Final grade for Reading for All Purposes = 3

Most frequent score.

Report Card

Oral Expression and Listening - 3

Reading for All Purposes - 3

Writing and Composition - 2

Research Inquiry and Design - 3

Final Grade - 3 (K-8)

HS ONLY!!

Final grade will be averaged to determine the GPA score. You will use the conversion chart to determine the letter grade

Final Grade - 2.75 → B

Conversion Chart- HS ONLY!

A	3.00-4.00	B	2.50- 2.99	C	2.00-2.49	D	1.00-1.99	F	Below 1.00
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Q & A

The background features a white upper section and a lower section with abstract, wavy shapes. On the left, a bright orange shape curves upwards. A dark blue shape curves downwards from the top right, meeting the orange shape. Below the blue shape is a lighter, yellowish-orange shape that also curves downwards, creating a layered, fluid effect.