What is my child learning in the 1st Quarter of 8th Grade?

Reading & Writing:

- Use information from fiction to support its main ideas – both those that are stated directly and those that are suggested. **(8.RL.2.1)**
- Cite information from a nonfiction text to support its main ideas – both those that are stated directly and those that are suggested. **(8.RN.2.1)**
- Learn new words by using what they know about prefixes, suffixes, and words that are alike, or similar and words that are opposite to create a working understanding. **(8.RV.2.1)**
- Analyze the figurative (metaphors, similes, personification, hyperbole, alliteration, idiom), literal (exact meanings), and connotative (feelings) meanings of words and phrases and analyze how those words/phrases impact the meaning of the passage. **(8.RV.3.1)**
- Write clear, well-structured, detailed narrative texts (autobiography, memoir, etc.) that: **(8.W.3.3)**
    a. draw readers in with a clear topic that unfolds logically.
    b. develop and expand on events and/or characters.
    c. use a variety of transition words to signal shifts between settings.
    d. use precise words and sensory details to keep readers interested.
    e. have a strong conclusion that reflects on the topic.
- Engage in the writing process to plan and develop, draft, revise, and strengthen their writing. **(8.W.4)**
- Students will also use technology to interact and collaborate with others to publish and present ideas efficiently. **(8.W.4)**

Math:

- Understand the difference between rational (can be written as a ratio of two integers; examples: 1, 1/3, -4.5) and irrational numbers (cannot be written as a ratio; examples: π, √2). **(8.NS.1)**
- Understand that every number has a decimal expansion and how to convert it. **(8.NS.1)**
- Compare rational and irrational numbers, by using approximations, and be able to plot them n a number line. **(8.NS.2)**
- Apply the properties of exponents, when simplifying expressions with common bases. **(8.NS.3)**
- Understand and apply the square roots of numbers when solving equations. **(8.NS.4)**
- Use the Pythagorean Theorem ($a^2 + b^2 = c^2$) to find the unknown length of a triangle. **(8.GM.8)**

What is my child learning in the 2nd Quarter of 8th Grade?

Reading & Writing:

- Determine a text's main idea by analyzing its relationship to supporting details as well as how it progresses throughout the text. **(8.RN.2.2)**
- Summarize the text as a whole without adding your own ideas or opinions. **(8.RN.2.2)**
- Evaluate the strength of the author's claims and reasoning. **(8.RN.4.1)**
- Identify any faults or weaknesses in the author's claims and reasoning. **(8.RN.4.1)**
- Write and develop arguments with clear reasons and strong evidence that includes: **(8.W.3.1)**
    a. a clear organization of claims and counterclaims.
    b. strong, accurate support for claims.
    c. the use of cohesive words, phrases, and clauses to link information.
    d. a formal style.
    e. a strong concluding statement that summarizes the argument.
- Conduct short research projects to answer a question using multiple sources and generating topics for further research. **(8.W.5)**
- Conduct searches to gather information from different sources and assess the strength of each source, following a standard format for citation. **(8.W.5)**

Math:

- Find the distance between two points using the Pythagorean theorem ($a^2 + b^2 = c^2$) (8.GM.9)
- Understand and apply scientific notation in a variety of problems including real world situations. (8.C.2)
- Solve multi-step equations and inequalities. These can include distributive property, combining like terms, variables on both sides and real world situations. (8.AF.1)
- Solve equations that have no solutions (example: $4x + 3 = 4x + 5$) and infinitely many solutions (example: $2x - 3 = -3 + 2x$) (8.AF.2)

What is my child learning in the 3rd Quarter of 8th Grade?

Reading & Writing:

- Analyze how a piece of literature develops over the course of the text in the sense of a theme or central idea. This is in relationship to characters, setting and plot. **(8.RL.2.2)**
- Provide detailed summary that supports the analysis (see previous entry). **(8.RL.2.2)**
- Use a variety of pronouns in their writing, including subject, object, possessive, and reflexive; providing pronoun agreement, recognizing and correcting pronouns. (I am, He is, she will, they have been, they will be) **(8.W.6.1)**
- Write clear, well-organized, and thoughtful informative and explanatory texts with the following: **(8.W.3.2)**
    a. a clear introduction and organization.
    b. sufficient supporting details and background information.
    c. quality transitions to link ideas.
    d. relevant vocabulary.
    e. a strong conclusion that restates the importance of the topic.

Math:

- Determine whether a table of values or a graph is a function. (8.AF.3)
- Determine if an equation is linear or non-linear. (8.AF.5)
- Create a table of values and graph linear (points on a graph form a straight line) and non-linear (points on a graph do not form a straight line) equations. (8.AF.5)
- Write an equation from a real world situation and state what the parts of the equation represent in terms of slope and y-intercept (Using the equation y=mx+b, where m is the slope and b is the y-intercept; A taxi charges a $10 flat fee plus $3 per mile traveled; The equation would be $y = 3x + 10$, where 3 is the slope and 10 is the y-intercept).(8.AF.6)
- Graph a system of equations (2 linear equations) and understand that the solution is where they cross. (8.AF.8)
- Find the volume of cones, spheres, and pyramids as it pertains to real world situations. (8.GM.2)
- Find the surface area of spheres as it pertains to real world situations. (8.AF.8)
- Understand the differences between independent, dependent, complementary, and mutually exclusive events as it pertains to probability. (8.DSP.4)
- Understand and use the multiplication counting principle (Example: If you decide to order a pizza, you must decide between thin or deep dish {2 choices} and between cheese, sausage or mushroom {3 choices}; using the principle there are 2x3=6 possible combinations). (8.DSP.6)

What is my child learning in the 4th Quarter of 8th Grade?

Reading & Writing:

- Use proper punctuation to show there is a pause or an omission in their writing. **(8.W.6.2b)**
- Write simple, compound, complex, and compound-complex sentences. **(8.W.6.1e)**
- Recognize and correct sentence fragments and run-ons. **(8.W.6.1e)**
- Vary sentence patterns for meaning, interest, and style. **(8.W.6.1e)**

Math:

- Understand that when figures are moved using translations (sliding the figure), reflections (a flip or mirror image) and rotations (turning the figure) that the parts of the figures remain the same. (8.GM.3)
- Understand that congruency (same shape and size)is determined by translating, reflecting, and rotating figure A to figure B. (8.GM.4)
- Understand that similarity (same shape but not same size) is determined through dilation (stretching or shrinking), translation, reflection, and rotation of figure A to figure B. (8.GM.5)
- Given a figure on a graph, dilate, translate, reflect, or rotate the figure to a new location. (8.GM.6)