Name: _____ **Math 8** - Brain Growth Tracker

Exponents	BRONZE	SILVER	GOLD	DIAMOND
1-6 I can use the properties of exponents to write equivalent expressions. [8.EE.1]	❑ Team Think bacteria	❑ Foldable Part 1 #1-12 w/ p. 40–41	❑ p. 43 #13-14	❑ p. 43 #15-18
1-7 I can write a number with a negative or zero exponent a different way. [8.EE.1]	❑ Team Think rumors	❑ Foldable Part 2 #13-18 w/ p. 46–47	❑ Math Doodle #1 *Animal Faces*	❑ Math Doodle #2 *Color-by-Number*
1-8 I can estimate large and small quantities using a power of 10. [8.EE.3]	❑ Team Think Powers of 10 Video	❑ p. 55 #7-9	❑ p. 55 #10-13	❑ World-o-meters activity
1-9 I can use scientific notation to write very large or very small quantities. [8.EE.4]	❑ Team Think 1-9 Intro activity	❑ p. 58–59	❑ p. 61 #8-15	❑ p. 62 #21
1-10 I can perform operations with numbers in scientific notation. [8.EE.4]	❑ Team Think Magnitude Sort	❑ p. 71 #9-14	❑ 1-10 Review Packet ≥50%	❑ 1-10 Review Packet ≥85%

Name: _____ **Math 8** - Brain Growth Tracker

Equations	BRONZE	SILVER	GOLD	DIAMOND
2-1 I can solve equations that have like terms on one side. [8.EE.7b]	❑ Team Think Hidden Circles	❑ Student Guide *Part 1*	❑ Finish Student Guide *Part 1*	❑ p. 89 #9-15 CHOOSE ONLY ONE PROBLEM.
2-2 I can solve equations with variables on both sides of the equal sign. [8.EE.7b]	❑ Team Think Hidden Circles	❑ Student Guide *Part 2*	❑ Finish Student Guide *Part 2*	❑ p. 95 #12
2-3 I can solve multistep equations in more than one way. [8.EE.7b]	❑ Team Think Hidden Circles	❑ p. 101 #11-15 WORK ON SEPERATE PAPER	❑ Chain Maze Activity *5 correct with all work shown.*	❑ Chain Maze Activity *10 correct with all work shown.*
2-4 I can determine the number of solutions an equation has. [8.EE.7a]	❑ Team Think balance benders	❑ p. 104–105 w/ notes	❑ p. 107 #4-5	❑ p. 110 #20-23

Continued on back ...

Name: _____ **Math 8** - Brain Growth Tracker

Linear Equations	 BRONZE	 SILVER	 GOLD	 DIAMOND
2-5 I can compare proportional relationships represented in different ways. [8.EE.5]	❑ Team Think Would you rather	❑ Ice Cream	❑ Gas Mileage	❑ p. 121 #6-8
2-6 I can understand the slope of a line. [8.EE.6]	❑ Team Think Street signs	❑ Slope foldable notes Slope Dude	❑ p. 127 #8-10	❑ p. 128 #11
2-7 I can write and graph equations to describe linear relationships. [8.EE.6]	❑ Team Think Scavenger Hunt Activity	❑ Investigation 1 *colored pencils & ruler*	❑ p. 133 #7-9	❑ p. 134 #13-14
2-8 I can find the y-intercept of a graph and explain what it means. [8.EE.6]	❑ Team Think Tub Draining	❑ p. 138 #1-5	❑ p. 139 #7-10	❑ p. 140 #11&13 only
2-9 I can derive the equation y=mx+b. [8.EE.6]	❑ Team Think Investigation 2 *colored pencils & ruler*	❑ p. 143 Try It & p. 145 #7-8, 10 *ruler*	❑ p. 146 #13-14	❑ IXL 8th Grade Y.6 ≥85%

Name: _____ **Math 8** - Brain Growth Tracker

Functions	BRONZE	SILVER	GOLD	DIAMOND
3-1 I can tell whether a relation is a function. [8.F.1]	❑ Team Think Will it Function?	❑ p. 162	❑ p. 163 #7-12	❑ P. 164 #13-16
3-2 I can identify functions by their equations, tables, and graphs. [8.F.1]	❑ Team Think Machines at Work	❑ 3-2 Function notes	❑ Kahoot! Join at **www.kahoot.it**	❑ p. 169 #6-10
3-3 I can compare linear and nonlinear functions. [8.F.2,3]	❑ Team Think Desmos – Card Sort Activity	❑ p. 175 #6-9	❑ p. 175 #10-12	❑ P. 177 #1-5 topic review
3-4 I can write an equation in the form y=mx+b to describe a linear function. [8.F.2-4]	❑ Team Think y=mx+b foldable	❑ Equation of a Line Notes	❑ Practice WS (front)	❑ Practice WS (back)
3-5 I can describe the behavior of a function and write a description to go with its graph. [8.F.5]	❑ Team Think Bungee Jump	❑ Qualitative Graphs	❑ p. 193 #6-10	❑ p. 194 #14
3-6 I can sketch the graph of a function that has been described verbally. [8.F.5]	❑ Team Think Desmos – Graphing Stories Slide 1	❑ Desmos *(cont.)* Graphing Stories Slide 2-12	❑ p. 199 #6-10 CHOOSE ONLY ONE PROBLEM.	❑ p. 200 #11-14 CHOOSE ONLY ONE PROBLEM.

Name: _____ **Math 8** - Brain Growth Tracker

Bivariate Data	BRONZE	SILVER	GOLD	DIAMOND
4-1 I can construct a scatter plot and use it to understand the relationship between paired data. [8.SP.1]	❑ Team Think Height vs Arm Span	❑ 4-1 Scatter plot Notes	❑ You Try!! Examples	❑ p. 215 #8
4-2 I can use a line to represent the relationship between paired data. [8.SP.2-3]	❑ Team Think IXL 8th Grade CC.15	❑ 4-2 Trend Line Notes *Lifespan Vs. Income Video*	❑ Puzzle Time	❑ p. 221 #6-10
4-3 I can make a prediction by using the equation of a line that closely fits a set of data. [8.SP.3, 8.F.3]	❑ Desmos - Scatter Plot Capture	❑ Drive-thru Scatter Plots	❑ p. 229 #1-4 topic review	❑ p. 229 #5-6 topic review
4-4 I can display and interpret relationships between paired categorical data. [8.SP.4]	❑ Team Think Super powers Survey	❑ Super Powers Two-way Table	❑ p. 235 #6-9	❑ p. 236 #11
4-5 I can find the relative frequencies of two-way tables and interpret what they mean. [8.SP.4]	❑ Team Think Fraction to Percents WS	❑ p. 240	❑ p. 241 #7	❑ p. 241 #8

Name: _____ **Math 8** - Brain Growth Tracker

Systems	BRONZE	SILVER	GOLD	DIAMOND
5-1 I can find the number of solutions of a system of equations by inspecting the equations. [8.EE.8]	❑ Team Think Desmos.com	❑ 5-1 Notes	❑ p. 262 #18-19	❑ IXL 8th Grade AA.5 ≥85%
5-2 I can find the solution to a system of equations using graphs. [8.EE.8]	❑ Team Think 3-Types of Solutions	❑ 5-2 Notes *Graphing Calculators	❑ Practice problems #1-4	❑ Practice problems #5-10
5-3 I can solve systems of equations using substitution. [8.EE.8]	❑ Team Think	❑ 5-3 Notes	❑ Practice problems - #1-5 Work on back or dry erase board.	❑ 10 practice problems - #6-10 Work on back or dry erase board.
5-4 I can solve systems of equations using elimination. [8.EE.8]	❑ Team Think Taco Tuesday	❑ 5-4 Notes	❑ Practice problems #1-4 Work on back or dry erase board.	❑ Practice problems #5-8 Work on back or dry erase board.

Name: _____ **Math 8** - Brain Growth Tracker

Congruence	BRONZE	SILVER	GOLD	DIAMOND
6-1 I can translate two-dimensional figures. [8.G.1,3]	❑ Team Think Scratch.mit.edu	❑ 6-1 Notes	❑ Practice WS #1-4	❑ Practice WS #5-6
6-2 I can reflect two-dimensional figures. [8.G.1,3]	❑ Team Think Mira Art	❑ 6-2 Notes	❑ p. 307 #7	❑ p. 308 #13
6-3 I can rotate two-dimensional figures. [8.G.1,3]	❑ Team Think	❑ 6-3 Notes	❑ p. 313 #6-7	❑ p. 313 #8-9
6-4 I can describe and perform a sequence of transformations. [8.G.1,3]	❑ Team Think Tetris	❑ 6-4 Notes	❑ p. 319 #9-10	❑ p. 320 #12-13
6-5 I can use a sequence of translations, reflections, and rotations to show that figures are congruent. [8.G.2,3]	❑ Team Think	❑ 6-5 Notes	❑ p. 331 #1-6 topic review	❑ IXL 8th Grade P.15 ≥85%

Name: _____ **Math 8** - Brain Growth Tracker

Similarity	BRONZE	SILVER	GOLD	DIAMOND
6-6 I can dilate two-dimensional figures. [8.G.3,4]	❑ Team Think Scale Models	❑ 6-6 Notes	❑ He Said, She Said	❑ p. 338 #12-13
6-7 I can use a sequence of transformations, including dilations, to show that figures are similar. [8.G.3,4]	❑ Team Think 3.14 = P.IE	❑ 6-7 Notes	❑ p. 343 #8	❑ p. 343 #9
6-8 I can identify and find the measures of angles formed by parallel lines and a transversal. [8.G.5]	❑ Team Think Flash Cards	❑ 6-8 Notes	❑ p. 350 #9	❑ p. 351 #13
6-9 I can find the interior and exterior angle measures of a triangle. [8.G.5]	❑ Team Think DESMOS – Triangle Sum	❑ 6-9 Notes	❑ IXL 8th Grade O.7 ≥85%	❑ p. 358 #13-15
6-10 I can use angle measures to determine if two triangles are similar. [8.G.5]	❑ Team Think Similar Triangles	❑ 6-10 Notes	❑ p. 363 #8	❑ p. 363 #9

Name: _____ **Math 8** - Brain Growth Tracker

Volume	BRONZE	SILVER	GOLD	DIAMOND
8-1 I can find the volume of three-dimensional prisms using the area of the base. [7.G.3]	❑ Team Think Dimensions	❑ 8-1 Notes	❑ IXL **7th** Grade AA.7 ≥50%	❑ IXL **7th** Grade AA.7 ≥85%
8-2 I can use what I know about finding volumes of rectangular prisms to find the volume of a cylinder. [8.G..9]	❑ Team Think Guess the Capacity	❑ 8-2 Notes	❑ p. 428 #16	❑ p. 428 #17
8-3 I can find the volume of a cone. [8.G..9]	❑ Team Think Cones to Cylinders	❑ 8-3 Notes	❑ p. 434 #6	❑ p. 436 #13
8-4 I can find the volume of a sphere and use it to solve problems. [8.G..9]	❑ Team Think Guess the Capacity	❑ 8-4 Notes	❑ #4 of notes *(corn silo)*	❑ Kahoot! Review

Name: _____ **Math 8** - Brain Growth Tracker

Roots	BRONZE	SILVER	GOLD	DIAMOND
1-1 I can write repeating decimals as fractions. [8.NS.1]	❑ Team Think Calc??	❑ Number System	❑ p. 11 #9-12	❑ p. 12 #18-19
1-2 I can identify a number that is irrational. [8.NS.1]	❑ Team Think From Ug to Infinity	❑ Get the Message	❑ p. 17 #7-9	❑ p. 17 #10-12
1-3 I can compare and order rational and irrational numbers. [8.NS.2]	❑ Team Think Mad Libs	❑	❑	❑ Soccer Estimation
1-4 I can find square roots and cube roots of rational numbers. [8.EE.2]	❑ Team Think ??	❑ Square and Cube Roots	❑ Puzzle pieces	❑
1-5 I can solve equations involving squares or cubes. [8.EE.2]	❑ Team Think ??	❑ Estimate	❑ p. 35 #10-13	❑ p. 35 #14-17
7-1 I can use the Pythagorean Theorem to find unknown sides of triangles. [8.G.6,7]	❑ Team Think ??	❑	❑	❑
7-2 I can use the Pythagorean Theorem to identify right triangles. [8.G.6,7]	❑ Team Think Pythagoras in 2 minutes	❑ Find the error	❑	❑
7-3 I can apply the Pythagorean Theorem to solve problems. [8.G.7]	❑ Team Think Math in the NFL	❑	❑	❑
7-4 I can use the Pythagorean Theorem to find the distance between two points in the coordinate plane. [8.G.8]	❑ Team Think Estimate the distance	❑	❑ p.	❑

Name: _____ **Math 8** - Brain Growth Tracker

Reality Check	BRONZE	SILVER	GOLD	DIAMOND
#1 Career Clusters Activity	❑ Career Clusters Survey	❑ Occupation	❑ Starting Salary	❑ Job Application
#2 Deductions	❑ Deductions	❑ Gross Monthly Income	❑ Net Monthly Income	❑ Disposable Monthly Income
#3 Savings and Student Loans	❑ 10% Savings	❑ Student Loan (total borrowed)	❑ Student Loan (total balance)	❑ Monthly Student Loan Payment
#4 Housing & Utilities	❑ Rental Ad	❑ Rent Check	❑ Rental Insurance	❑ Utilities
#5 Transportation	❑ Car Ad	❑ Auto Payment	❑ Auto Fees	❑ Auto Insurance
#6 Groceries	❑ Grocery List - Food	❑ Grocery List - Toiletries etc.	❑ Total monthly groceries	❑ Total monthly groceries w/ tax
#7 Miscellaneous	❑ Personal Care & Clothing	❑ Subscriptions & Entertainment	❑ Pets	❑ Donations/ Charity
#8 Balanced Budget	❑ Unbalanced Budget	❑ Balanced Budget w/ one error	❑ Balanced Budget w/ one error	❑ Balanced Budget w/ No errors

(+) 10% Bonus: Circle Graph of your Budget

Name: _____

Math 8 - Brain Growth Tracker

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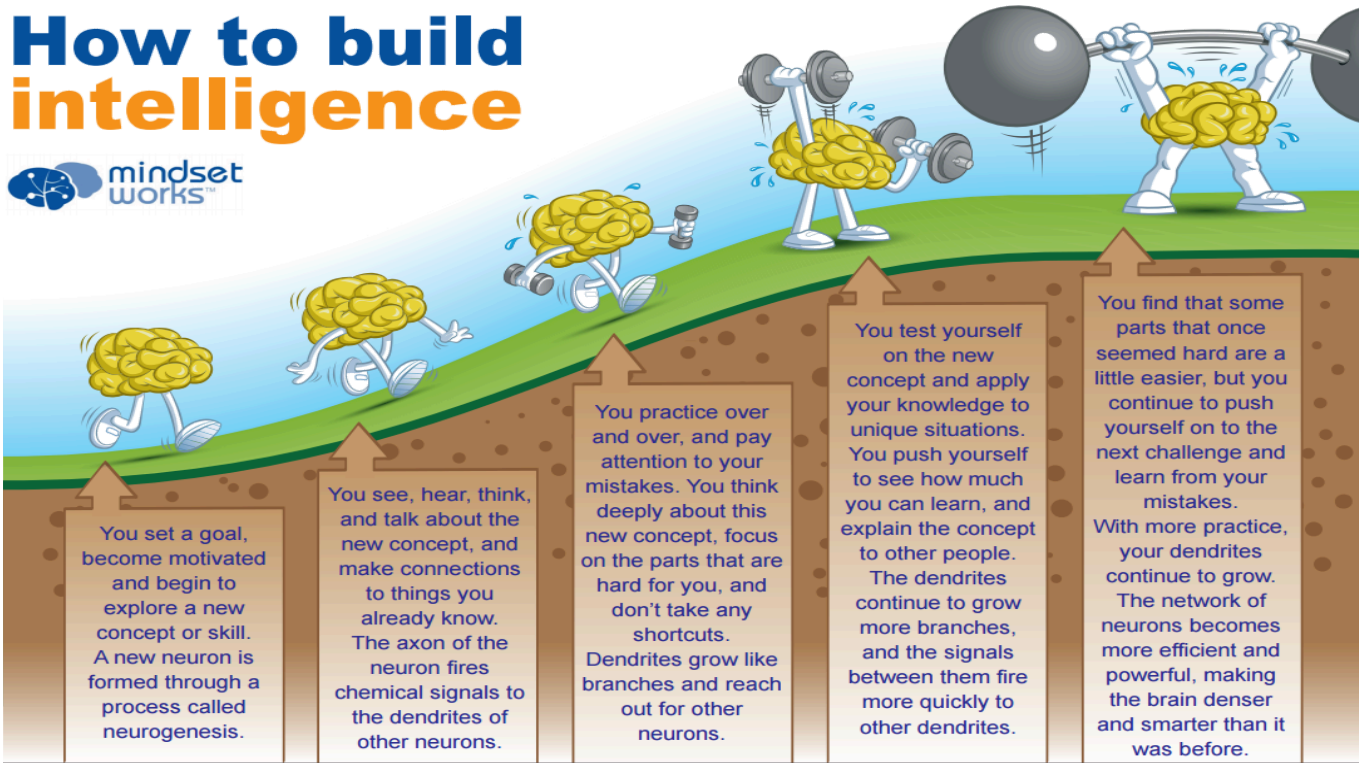
Class Procedures:



Each learning **goal** will be discussed as a class to produce a new neuron.

Tasks will then be leveled based on complexity and the stages above. A score of 1 (25%) will be given for completion of the bronze assignment. A score of 2 (50%) will be given for the silver assignment. A score of 3 (75%) will be given for gold and a score of 4 (100%) will be given for completing a diamond assignment.

Bronze assignments are completed as a class. These activities are meant to make connections to things students already know. Chemical signals from the axons of the neuron fire to the dendrites of other neurons.

Silver assignments provide guided and coached practice. Mistakes are made and discussed. Students should focus most on the parts that are the hardest. We should remember that at this stage struggle and frustration is our dendrites growing like branches and reaching out for other neurons.

As the dendrites continue to grow, students work on gold assignments independently, with a partner or in a small student group. The teacher encourages students to persevere with limited support.

Diamond assignments are meant to demonstrate mastery. Students work in various ways to reflect on and demonstrate a thorough understanding of the learning goal.