

Name: _____

MATH 7 HONORS SCRAPBOOK PROJECT

DUE WEDNESDAY, SEPTEMBER 12, 2018

You will create a scrapbook with the following information listed below on a separate page. Your project will be graded on accuracy, neatness, grammar, and overall creativity. **NO LATE PROJECTS!** Your scrapbook must be neat and colorful. Projects can be **neatly** handwritten or typed. If you create it digitally, you can use Slides, PowerPoint, Prezi, or another presentation module. **PLEASE DO NOT WAIT UNTIL THE LAST MINUTE TO COMPLETE THIS PROJECT!**

To submit your project, join the 8th Grade Google Classroom using the code h3gpx77. Please share your final project to the google classroom. If you choose to create your project by hand, please add a comment stating this and press submit assignment.

1. Title Page- On this page, you must display the title: **Scrapbook Project**, your name, the due date (September 12, 2018), and your 7th grade teacher's name must also be included.

2. Table of Contents- On this page, you must list all the topics that will be included in your booklet and the page number each topic can be found on.

3. The Distributive Property- On this page, you must answer the following questions, **SHOWING YOUR WORK FOR EACH. Simplify each expression.**

a. $-2(3x^2 + 5x + 1)$

c. $\frac{1}{2}(16x - 12y + 4z)$

b. $-2(3x + 2y - z)$

d. $(2 - 3x + x^2)3$

4. Connecting Words and Algebra- On this page you will answer a word problem. Then you will create and solve your own algebraic word problem. You must **EXPLAIN** how to solve the problem and how you know your answer is correct.

a. VEHICLES Recently developed hybrid cars contain both an electric and a gasoline engine. Hybrid car batteries store extra energy, such as the energy produced by braking. Since the car can use this stored energy to power the car, the hybrid uses less gasoline per mile than cars powered only by gasoline. Suppose a new hybrid car is rated to drive 45 miles per gallon of gasoline.

1. It costs \$40 to fill the gasoline tank with gas that costs \$3.00 per gallon. Write and solve an equation to find the distance the hybrid car can go using one tank of gas.

2. Write and solve an equation to find the cost of gasoline per mile for this hybrid car. Round to the nearest cent.

b. Create a word problem that involves using an algebraic equation with at least two steps.. Solve your problem and explain how you solved.

Rubric

	Below Expectations (1)	Approaching Expectations (2)	Meeting Expectations (3)	Exceeding Expectations (4)
The Distributive Property	Problems are incorrect and the work provided is incomplete.	2-3 of the problems are correctly solved. Work for each problem is incomplete.	Correctly solved all four problems and included work for each problem.	Correctly solved all four problems and included work for each problem. The work provided is neat and organized.
Connecting Words and Algebra	Explanations are incorrect and the work provided is incomplete.	Student created a word problem, but the explanation is not accurate. The work for each problem is not shown algebraically.	Explained how to solve their word problem. Both the created word problem and provided word problem are solved algebraically. All steps are provided.	Critically explained how to solve their word problem. Both the created word problem and provided word problem are solved algebraically. All steps are neatly provided.
Equations	Problems are incorrect and the work provided is incomplete.	2-3 of the problems are correctly solved. Work for each problem is incomplete.	Correctly solved all four problems and included work for each problem.	Correctly solved all four problems and included work for each problem. The work provided is neat and organized.
Combine Like Terms	Many errors are present when creating a situation to represent combining like terms and solving the given problems..	Explains combining like terms and the created example does not accurately demonstrate the skill. 1 problem is solved correctly.	Explains combining like terms and creates an example that accurately demonstrates the skill. All problems are solved correctly.	Critically explains combining like terms and creates a realistic example that accurately demonstrates the skill. All problems are solved correctly.
Inequalities	Incorrectly describes inequalities and the meaning of each sign. Many errors when writing and graphing examples given.	Describes inequalities and the meaning of each sign. Few errors when writing and graphing examples given.	Evaluates and describes inequalities and the meaning of each sign. Correctly writes and graphs examples given.	Critically evaluates and describes inequalities and the meaning of each sign. Correctly writes and graphs examples given. Connects the examples to their explanation.
Solving for the Unit Rate	Problems are incorrect and the work provided is incomplete.	Solved both problems with few errors. Included work for each problem.	Correctly solved and explained both problems. Included work for each problem. The work provided is neat and organized.	Correctly solved and explained both problems. Included work for each problem. The problem created directly represents a real life situation. The work provided is neat and organized.
Solving Proportions	Problems are incorrect and the work provided is incomplete.	2-3 of the problems are correctly solved. Work for each problem is incomplete.	Correctly solved all four problems and included work for each problem. Solutions are included for each.	Correctly solved all four problems and included work for each problem. The work provided is neat and organized. Solutions are included for each.
Function Tables	Problems are incorrect and the work provided is incomplete.	1 of the problems are correctly solved. Work for each problem is incomplete.	Correctly solved both problems and included work for each problem.	Correctly solved both and included work for each problem. All of the work is included within a table with the equation included.
Reflection	The reflection, explanation, and/or connection does not meet the minimum requirements.	Reflection meets the minimum of 5 sentences. The topic is not explained or does not include a connection.	Reflection meets the minimum of 5 sentences. The topic is explained and includes a connection to everyday life.	Reflection exceeds length minimum. The topic is critically explained and includes realistic connections to the student's everyday life.
Organization	The project requirements are not in order.	The project includes all requirements. Some of the work is not in the outlined order.	The project is organized and includes all necessary requirements.	The project is put together in an organized way. All requirements are easily accessible (titles, page numbers, etc.).
Grammar	There are many grammatical and punctuation errors.	Project includes 3-6 grammatical or punctuation errors.	Project includes 1-2 grammatical or punctuation errors.	Project does not include any grammatical or punctuation errors.
Neatness & Creativity	The project does not show any creativity and is not neat.	Project is neat, but shows little creativity.	Project is neat and shows creativity.	Project exceeds expectations of neatness and creativity.
Date	Project was turned in after the due date.	Project was turned in on time.		

Total: _____/50