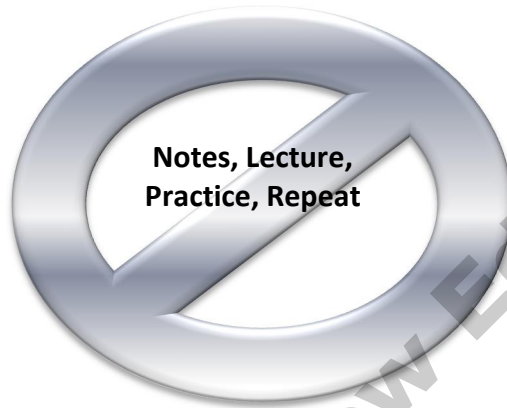


# The ABC's of Math Differentiation

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**REACHING ALL LEVELS OF LEARNERS  
BREAKING THE MOLD OF...**



**A RESOURCE ALIGNED TO THE COMMON CORE STANDARDS  
3 TIERS OF DIFFERENTIATED LESSONS  
USING REAL WORLD APPLICATIONS**

Cheryl Beasley and Blair Haake

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# TABLE OF CONTENTS

## Chapter 1: Numbers and Operations

- Fraction, Decimals and Percents.....**Percent Stations, Real World Percents**  
6.RP.2, 6.RP.3, 7.RP.2, 7.RP.3, 7.EE.2 ..... 8
- Order of Operations.....**Telephone Math**  
5.OA.1, 5.OA.2, 6.EE.1, 6.EE.3, 7.NS.1, 7.NS.3 ..... 18
- Ratio and Proportions.....**Outrageous Omelet, Grocery Ads**  
6.RP.2, 6.RP.3, 7.RP.1, 7.RP.2, 7.RP.3 ..... 22
- Integers .....**Integer Interception**  
5.OA.2, 6.NS.5, 6.NS.6, 7.NS.2, 7.EE.3 ..... 30

## Chapter 2: Algebra

- Writing and Solving Multi-Step Equations.....**Aggravating Age Problems, Simple Interest and Mortgages**  
6.EE.2, 6.EE.7, 7.EE.3, 7.EE.4a ..... 36
- Slope and Linear Equations.....**Weather Web Quest**  
6.NS.6c, 7.RP.2b, 8.F.1, 8.F.4, 8.EE.5 ..... 48
- Solving for a General Rule.....**Algebra Stations**  
6.EE.2, 6.EE.4a, 6.EE.6 ..... 51

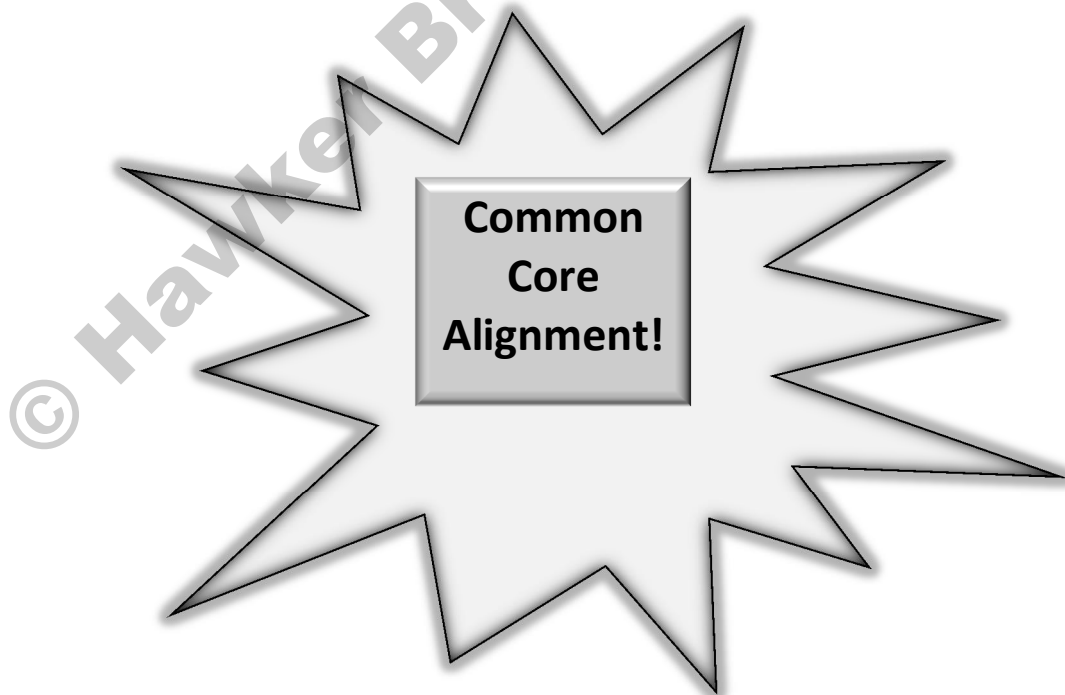
## Chapter 3: Geometry

- Pythagorean Theorem.....**Hypotenuse Hunt**  
8.G.7 ..... 55
- Congruent vs. Similar.....**Photo Hunt**  
4.G.2, 8.G.2 ..... 61

## Chapter 4: Measurement

- Circumference and Area of Circles.....**Wind Turbine, Calzone Mania**  
7.G.4 ..... 66
- Perimeter and Area.....**Building a Fence**  
3.MD.8, 4.MD.3 ..... 75

▪ Conversions of Measurement.....	<b>Measurement Conversions</b>	
4.MD.1, 5.MD.1 .....		82
▪ Volume and Surface Area.....	<b>Sport's Drink</b>	
5.MD.4, 5.MD.5, 6.G.2, 6.G.4, 7.G.6, 8.G.9 .....		84
<b>Chapter 5: Data Analysis and Probability</b>		
▪ Graphing.....	<b>Misleading the Masses, Population Explosion</b>	
6.SP.4, 6.SP.5ab, 7.RP.2bd .....		87
▪ Central Tendencies.....	<b>Sweet Task</b>	
6.SP.3, 6.SP.5c .....		99
▪ Probability.....	<b>Custard Confuser</b>	
7.SP.7, 7.SP.8, S-CP.9 .....		102
<b>Chapter 6: Communication and Problem Solving</b>		
<b>Facts and Problem Solving</b> .....		106
<b>Friday Fun Questions</b> .....		120
<b>Answers</b> .....		122



## INTENT OF USE

As you look at the table of contents, you will find the book's mathematical concepts with specific objectives. Each activity has a theme and poses a real world problem to the students. These activities are able to be used as an assessment or application of the skill they learned.

The last chapter contains questions aimed at enhancing problem solving skills. These can be used as challenge work, homework, station or center work. They also encourage practice of problem solving skills and can last one full class period, for the few days before a holiday break, on a mixed up schedule day, or if a teacher needs a substitute.

The title of the book is no coincidence. The letters **A**, **B**, and **C** stand for the different level learners that appear in our classroom. It is always best to pre-assess all concepts either formally or informally in order to decide where your students are at for each specific topic.

**A** – Is intended for the average or on grade level learner. The student who understands the concept and is ready to apply the material will benefit from these tasks.

**B** – Is to be used with students who are below grade level. These activities have more support for these students, showing examples and getting them started on the problem solving process.

**C** – Is meant for the student who needs to be challenged. These are the students who have mastered the concept and are ready to apply their knowledge by taking the lesson one or two steps further than the topic at hand.

The letters identifying the level are found in a box at the top of each activity. Sometimes, due to the structure of the task and open-endedness two groups of students can do the same activity, because there is room for the student to take the lesson as far as they need.

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

## PERCENT STATIONS

**B**

Percents can easily be found in the world around us. Below are three stations that you can complete.

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**Station A:** Find 25% off of an item. Then find what the new total will be.

For example, if I buy a pair of shoes for \$45.50 and take 25% off I would have to do the following computations:

$$\$45.50 \times .25 = 11.375 \text{ (11.38 rounded to the next cent)}$$

That means that \$11.38 is how much will be taken off of the price.

$$\text{So } \$45.50 - \$11.38 = \$34.07 \text{ will be my new price for the shoes.}$$

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**Station B:** Find the percent they took off.

Set up a proportion

$$\frac{19.99}{100\%} = \frac{17.99}{X\%} \quad \text{Cross multiply.}$$
$$19.99 X = 100 \times 17.99$$

$$X = 89.9999 \quad \text{we will call it 90\%}$$

So 10 % is the percentage taken off.

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**Station C:** Find the tip amount.

You need to take 15% off of the total bill.

$$\text{For example if my bill is } \$25.75 \times 15\% = \$3.68$$

The tip I could leave is \$4.00 if the cents are rounded up to the next dollar.

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**A** Complete Station A, B, and C. If time allows you can choose one more of the stations to complete (D or E).

**C** Complete Station B, D, and E. If time allows please create your own shopping problem using percents and real world situations.

## STATION A

*What will the new price be after you take off the 25% savings?*

1.



Notebook: \$599.00

\_\_\_\_\_

2.



Crock Pot: \$24.99

\_\_\_\_\_

3.



Portable GPS with 3.5" touch LCD: \$249.99

\_\_\_\_\_

4.



Automatic Ice Cream Maker Yumm!! \$49.99

\_\_\_\_\_

## STATION B

*These items below are on sale, what was the percentage off?*

1.



### Men's pants

Regular Price: \$19.99

Sale Price: \$17.99

\_\_\_\_\_

2.



### Vacuum

Regular Price: \$129.99

Sale Price: \$89.99

\_\_\_\_\_

3.



### Electric Roaster

Regular Price: \$29.99

Sale Price: \$14.99

\_\_\_\_\_

4.



### Candles

Regular Price: \$ 11.99

Sale Price: \$8.99

\_\_\_\_\_

5.



### Gazebo

Regular Price: \$199.99

Sale Price: \$149.99

\_\_\_\_\_

## STATION C

*A good tip amount is 15%.*

1. If your bill is \$23.58, what tip should you leave?

\_\_\_\_\_



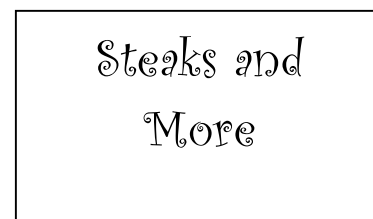
2. If your bill is \$69.09, what tip should you leave?

\_\_\_\_\_



3. If your bill is \$45.00, what tip should you leave?

\_\_\_\_\_



4. If your bill is \$34.99, what tip should you leave?

\_\_\_\_\_