



Welcome future sixth graders and families to The BELL Academy! Everyone at BELL is excited to welcome you all into our school community. We are looking forward to seeing you grow through a positive and successful middle school experience! ☺

During your time at BELL, your teachers will help you get on the right path to College and Career Readiness by helping you get organized, manage your time and supplies appropriately, prepare you with skills needed to be successful in both school and the real world and award you with many opportunities to showcase your unique gifts and talents! As your math teacher, I am looking forward to learning about each of you and your ideas about math-whether its your best subject or if your scared of it-I hope you will find just how important it is to be a great mathematical thinker!

*Do you like to go shopping? Do you text and/or talk on the phone? Do you like to follow sports teams and scores? Do you like to build new things?* Well if so, MATH is the thing for you!!! One of your core classes at BELL will be mathematics and since **math is everywhere**, we will be diving deep into new and important concepts. I hope to get you excited to learn new topics with investigative problems, real world projects and critical thinking tasks to prepare you to be lifelong mathematicians! I am very eager to build each of you to be the great problem solvers I know you can be!

Sixth Grade math introduces you to new, important skills and builds upon skills learned in previous grades.

**Major topics to know coming into 6<sup>th</sup> Grade:**

- ✓ Adding, Subtracting, Multiplying and Dividing (Whole Numbers and Decimals to the hundredths place)
- ✓ All multiplication facts (1-12)
- ✓ Place value
- ✓ Adding, subtracting and multiplying fractions
- ✓ Simplifying fractions/finding equivalent fractions

**Major topics you will experience throughout 6<sup>th</sup> grade:**

- Ratios and Rates
- Dividing Fractions (Modeling Division of Fractions)
- Evaluating Expressions
- Solving Equations and Inequalities
- Introduction to Integers
- Surface Area, Coordinate Geometry, Volume

To help me understand your strengths and weaknesses I am asking to complete the following task problems. All the topics involved are ones you should have worked on in 5<sup>th</sup> grade. The most important thing is that this is YOUR work because I want to get a sense of your INDEPENDENT thinking skills and your own strategies in solving problems. All I ask is that you TRY YOUR BEST! For full credit, please hand in the completed assignment by September 16<sup>th</sup>, 2016. *Assignments will not be accepted for credit after September 30<sup>th</sup>, 2016.* Good Luck BELL Mathematicians!

Sincerely, *Mrs. Shepard*

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## Summer Math Task Assignment

**Directions:** Complete the following problems on loose-leaf paper. Be sure to write your name at the top of your paper and label each problem.

### Part 1: Stuffed with Pizza

**Background Information:** Everyday during the summer Sam, Gino and Keiko meet up at the local pizzeria for lunch. After learning about nutrition in school, Sam decided to make some observations about his friends' eating habits. He notes that all pizzas are the same size and after observing for three days, he organized his observations into a table.

Person	DAY 1	DAY 2	DAY 3
<b>GINO</b>	ONE-FOURTH OF A CHEESE PIZZA	THREE-EIGHTHS OF A PEPPERONI PIZZA	ONE-HALF OF A MUSHROOM PIZZA
<b>KEIKO</b>	FIVE-EIGHTHS OF A CHEESE PIZZA	ZERO SLICES OF PIZZA	ONE-HALF OF A MUSHROOM PIZZA

- a.) Who ate more pizza on day 1? How much **more** did they eat? Show ALL work.
- b.) What is the total amount of pizza consumed by both Gino and Keiko after 3 days? Show ALL work.

### Part 2: Summer Camp Fun

**Background Information:** At Camp Fort, the middle school students get an hour of free time out on the square play field. Some of the 6<sup>th</sup> graders like to play basketball and the 7<sup>th</sup> and 8<sup>th</sup> graders like to play soccer. Campers from all grades like to sit and read or write letters to their families and friends. In order to keep everyone safe, the camp counselors set aside  $\frac{1}{5}$  of the field for kids to sit and read/write. Of the remaining field area, the counselors set aside  $\frac{2}{3}$  for campers to play soccer.

- a.) Draw a diagram to show what fraction of the entire play field is set aside for soccer. Be sure to clearly label your diagram.
- b.) Defend your diagram with a written explanation.

### Part 3: Skills Set-Show all work (Standards 5.NBT.5-7)

1.)  $415 \times 29$

2.)  $1,084 \div 20$

3.)  $5.01 + .22$

4.)  $6.78 - 3.9$

5.)  $10.6 \times 7.2$

6.)  $1\frac{1}{3} \times \frac{2}{4}$