Main Course Choices – Choose one problem to solve and present to a group of your classmates.

1. **Chantelle’s Hike:** Chantelle is going on an 8–day hike of 82.5 miles. She plans to hike 8.25 hours every day for each of those 8 days. How many miles will she cover each hour of her trip?

2. **Divisible by Five:** The smallest number that is divisible by 5 but leaves a remainder of 1 when divided by 2, 3, or 4 is 25. What is the next smallest number divisible by 5 but leaving a remainder of 1 when divided by 2, 3, or 4?

3. **Widgets:** A factory produces 10 widgets per second. How many hours does it take the factory to produce 90,000 widgets?

4. **Fast Bike:** Ben has a new 15–speed bike. He wants to see how fast it will go down a hill near his home. The bike doesn’t have a speedometer, but Ben knows the hill is 4.4 miles long, and he also knows that it take him exactly 9 minutes to travel down the hill. How many miles per hour does his bike travel?

5. **Superstar:** The speed of light is about 186,000 miles per second. If a star that is 46,925,568,000,000 miles away exploded in 2013, what year will we know about it on earth?

6. **For Profit:** Twice Read Tales sells used books. The store bought Henry’s collection of old Farm and Home magazines for $195.00. They sold the lot for $322.50, and this gave them a profit of $0.50 per magazine. How many magazines did Henry sell them?

7. **Best Batting Average:** In May 1999, two National League baseball players, Joe McEwing of the St. Louis Cardinals and Mike Lieberthal of the Philadelphia Phillies, each had the batting averages shown in the table.

<table>
<thead>
<tr>
<th>Player</th>
<th>Bats</th>
<th>Hits</th>
<th>Batting Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>M. Lieberthal</td>
<td>132</td>
<td>45</td>
<td>.341</td>
</tr>
<tr>
<td>J. McEwing</td>
<td>132</td>
<td>45</td>
<td>.341</td>
</tr>
</tbody>
</table>

   Suppose McEwing then batted .800 (4 hits in 5 at bats), and Lieberthal was perfect (3 hits in 3 at bats). Which player now has the higher batting average? Give the new averages.
Menu Problem Requirements:

- Product Choices: **Computer–Generated Booklet**, (must be created in google drive, assembled into a booklet, and printed in color), or a **Weebly Webpage** (must get your account from Mrs. Wade)

- Book Cover or top of Webpage must include your name and the problem title

- Must be creative, neat, and colorful

- Must include the complete problem and the answer in a complete sentence

- Must include number sentence(s) or equation(s)

- Must show all the work of division (a calculator may only be used to check your work). The following is a number sentence but is NOT considered showing work: 179/4 = 44.75

- Must include a written explanation of the strategy you used and how you solved the problem. This explanation must include math vocabulary and tell why the steps were performed.

- Must include a written explanation of the resources you used and how they were of help to you

5th Grade Topic 3 Dessert Problems - Division

Dessert Problem Choices – After completing one main course menu problem, choose a dessert problem to solve. If correctly solved, and presented, you will earn challenge points for this 9 weeks and an Einstein!

1. **Mystery Dividend:** In the division problem to the right, find the digit represented by “M”.

2. **$1000 in Dimes:** Ten dimes weigh an ounce. A roll of dimes is $5.00. How much does $1000 in dimes weigh?

3. **Apples and Plums:** Six apples cost $1.32. Eleven plums cost as much as 4 apples. What is the cost of 9 plums?

4. **Family Trip:** A family leaves their house on Monday at 8:15 am for a 1530 mile trip. If they average 42.5 mph, on what day and at what time will they arrive at their destination?
The purpose of this enrichment math project is to increase the rigor through problem-solving and exploring mathematical concepts in greater depth. The project is designed to provide students with choice, extra challenge, and opportunities for creativity. A major focus is also communication skills, including oral, written, and visual. Since these projects go beyond the regular fifth grade curriculum, we want the focus to be on thinking and learning, not grades. Thus, students will be permitted to improve their projects and resubmit them for a higher grade within two weeks after the graded project is returned.

Student Name _____________________________________________________________

Problem Choice____________________________________________________________

___________________________________________________________________________

Product Choice______________________________________________________________

___________________________________________________________________________

Problem Completion Due Date___________________________________________________
(must be completed on the problem-solving record sheet)

Product and Presentation Due Date_____________________________________________
(must bring the completed student evaluation)

Desert Problem Choice________________________________________________________
(optional – to count toward this 9 weeks challenge problem points)

___________________________________________________________________________

Parent
Signature___________________________________________________________________________