

Enhancement Activities/Strategies for Gifted/High Ability Learners: Sample Mathematics Learning Plan

Big Idea/ Topic

- Understand place value
- Extend division to 2-digit divisors, integrate decimal fractions into the place value system and develop understanding of operations with decimals to hundredths, and develop fluency with whole number and decimal operations

Standard Alignment

- **MGSE5.OA.1** Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.
- **MGSE.5.OA.2** Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation “add 8 and 7, then multiply by 2” as $2 \times (8 + 7)$. Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$, without having to calculate the indicated sum or product.

Advanced Research

Party Planner Project: Use your creativity to research and plan a party for 26 people. You can choose the purpose of the party (celebration, holiday, birthday, etc.). Use graphic organizers or slides to organize your information.

1. What is the purpose of the party?
2. Who will be there?
3. Where will the party take place?
4. What activities will be happening at the party (you might have games, entertainment like a DJ, etc.)?
5. What food will be served?
6. What decorations will you use?
7. Any other expenses?
 - For each slide/organizer, also include any costs involved. You will need to do some virtual shopping to determine expenses. You might want to shop at Amazon, Walmart, etc. Write the cost as a mathematical equation, using parentheses, brackets, and braces on each individual slide. For example, at a birthday party for my brother, we will need 2 dozen cupcakes (\$4.99 per dozen), 3 bags of chips (\$2.59 per bag), 6 2-liters of soda (\$1.55 per bottle), and 1 case of bottled water (\$4.57). The equation for drinks and food will be $[(1.55 \times 6) + 4.57] + [(2 \times 4.99) + (3 \times 2.59)] = \29.03 .
 - At the end of your slideshow, total the entire cost for your party. Be prepared to share your party plan

with others. Be sure your slideshow is appealing, organized, and clear. Double check all of your calculations!
This project takes approximately 120 minutes to complete.

Communication

Share the information from your research for the party with your class. Choose a creative way to communicate your findings through PPT, song, video, etc.

Critical Thinking and Critical Problem-Solving Skills

Challenge your students to play a game which requires students to use 4 numbers and various calculations to reach find the answer of 24. You may find samples online. Then create other versions with different target numbers in each problem. Students may need scratch paper or a personal whiteboard to assist in solving the problems.

Creative Thinking and Creative Problem-Solving Skills

Design a new clock for our classroom, but make it more mathematical! Your clock should not include the typical numbers 1 through 12. Write an expression to be in the place of each number on the clock. Challenge yourself to make it unique and include parentheses, brackets, and braces. Use a paper plate or construction paper to make your final product.

Awareness of Self—Student's Well-being

Using one of two digital math games, encourage students to collect data and set goals to improve speed and accuracy. For example, how many problems can the student solve in 5 minutes or how long does it take to solve 10 problems in the game? What are some strategies for improving? Discuss with a partner or one-to-one with the teacher.

Name _____

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