

NWMC 2025 Presentation: Beyond the Worksheet

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Purpose

- **Goal:** Share new, engaging ways for students to practice math beyond traditional worksheets.



Background

Traditional worksheets often lead to copying, disengagement, or behavioral issues.

Many students feel overwhelmed by seeing too many problems at once.

Activities are designed so students focus on one problem at a time.



Entry Task Routine

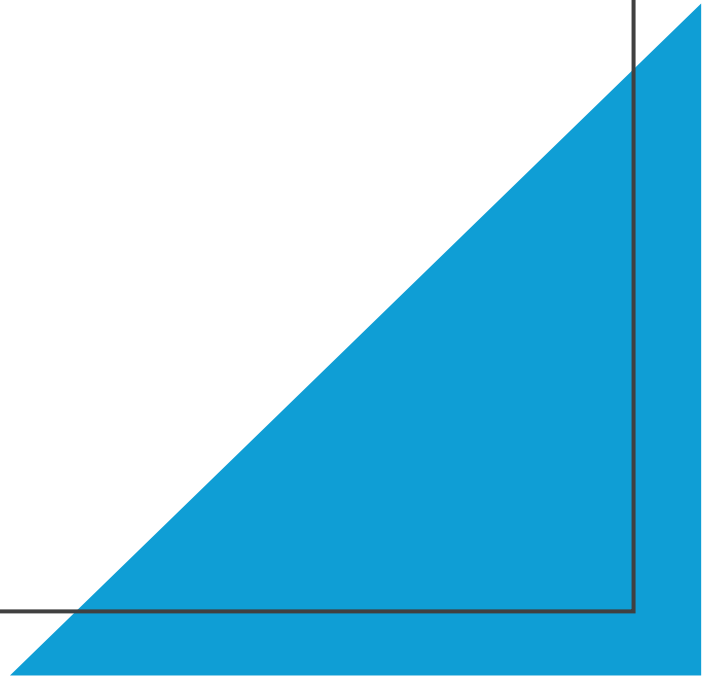


AT THE START OF CLASS: 3–5 QUESTIONS
REVIEWING PREVIOUS AND CURRENT
MATERIAL.



STUDENTS WORK INDEPENDENTLY,
SUBMIT THEIR WORK, AND SELF-ASSESS
AT THE END OF CLASS.

Activities



Musical Math

Desks arranged in two circles; students face each other.



Music plays; students rotate until it stops, then solve a problem.



Compare answers with a partner, seek help if needed, and repeat with increasing difficulty.



Scavenger Hunt

Worksheets posted around the room; each answer leads to the next worksheet.



Students work in pairs (coaches and players based on entry task performance).



Must find the next worksheet by solving problems; mistakes require revisiting work.



Teacher provides hints at a “help desk.”

Connect Four

Worksheet problems cut into pieces; answer key available.



Students solve problems to earn disks for Connect 4.

Correct answers earn a disk; incorrect answers get hints.

Play continues until a team wins; prizes for participation and winners.

Poker



Math problems correspond to cards (absolute value, fractions, wild cards).

Teams solve problems to earn cards; best poker hand wins.

Prizes for winners and consolation for participants.

Battleship on a Board



Focus on graphing lines.



Dice rolls determine moves; points earned based on landing spots.




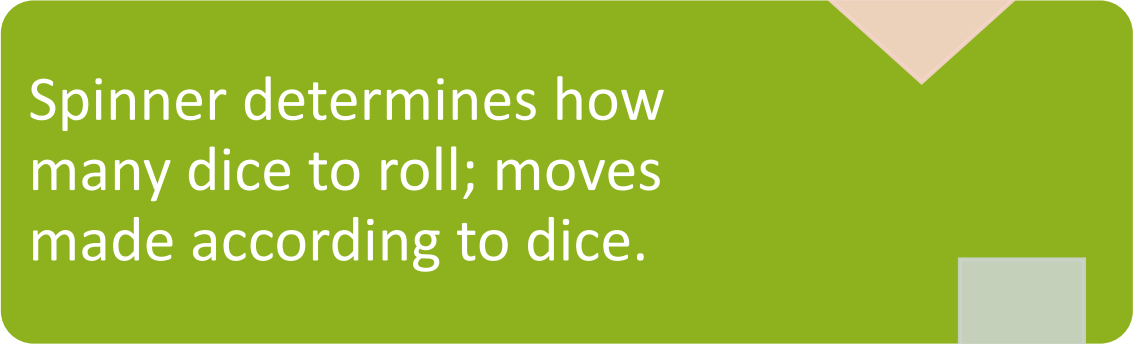
Extensions include graphing in slope-intercept form and connecting points for extra scoring.

Transformation Game

Each student gets a triangle
and transformation dice.



Spinner determines how
many dice to roll; moves
made according to dice.



Points for landing on colored
spaces; capturing other
players resets their score.



Conclusion



THESE GAMES HAVE BEEN EFFECTIVE
IN ENGAGING STUDENTS.



ONGOING DEVELOPMENT OF A D&D-
INSPIRED MATH GAME FOR PRE-CALC.



FINAL ACTIVITY: PARTICIPANTS
BRAINSTORM A GAME OR ACTIVITY
FOR THEIR OWN CLASS.

