

Lesson Plan # 5 - Math

Title: Make Fifteen

Introduction:

This is a game for 2 players that provides practice for building and solving equations.

Objectives:

In this lesson, students will:

Add, subtract, multiply, divide, and use order of operations to form equations

Session time: 5-20 minutes

Materials:

3 dice

Paper to record equations and score

Methods:

Teacher demonstration, cooperative learning, interactive participation

Procedures:

- 1) In turn, each player throws 3 dice and uses the number showing on top to form equations naming numbers 1 to 15 in that order. The number on each die must be used once, and only once, in an equation.
- 2) When a player is unable to form an equation that names the next number, the play passes to the next player.
- 3) Example: First player throws 2, 4, and 6 and forms the equations below.

$$(2 + 4) \div 6 = 1$$

$$(2 \times 4) - 6 = 2$$

$$(2 \times 6) \div 4 = 3$$

$$(6 + 2) - 4 = 4$$

$$(6 + 4) \div 2 = 5$$

- 4) The player is unable to name 6, so the dice are passed to the next player. Player number one will begin naming numbers at 6 on the next round of play.
- 5) The first player to name all numbers to 15 is the winner; however, if both players reach 15 in the same round, extend the goal to 21.

Conclusion:

This game can be modified using more or less dice to simplify or make the game more complex. This is a great review which reinforces learned skills in a relaxed atmosphere.

Note: This lesson is included in the workshop, **Math Manipulatives for the ABE/GED Classroom**, in the **SIPDC Catalog of Professional Development Opportunities**.