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Factor That

Lesson Overview: Students get a chance to take a movement break while working on reinforcing mathematics skills.

Grade Level: 1st-5th

Lesson Time: 10 + minutes

Prior Knowledge: Basic mathematics depending on grade level.

Materials Needed: Cards with numbers or equations teacher intends to use

Content Integration:

- Mathematics
- Physical Education
- Health Education

Corresponding Standards:

Common Core State Standards for Mathematics

- Operations and Algebraic Thinking
 - Represent and solve problems involving addition and subtraction.
 - Understand and apply properties of operations and the relationship between addition and subtraction.
 - Add and subtract within 20.
 - Work with addition and subtraction equations.
 - Work with equal groups of object to gain foundations of multiplication.
 - Represent and solve problems involving multiplication and division.
 - Solve problems involving the four operations.
 - Gain familiarity with factors and multiples.

Oregon Standards

- Promotion of Physical Activity
 - Acquire knowledge and skills to understand the role physical activity has in promoting health.
- Expressive and Efficient Moving
 - Demonstrate knowledge of a variety of motor skills.

National Physical Education Standards

- Demonstrates competency in a variety of motor skills and movement patterns.
 - Locomotor
- Demonstrates the knowledge and skills to achieve and maintain a health-enhancing level of physical activity and fitness.

- Physical activity knowledge
- Fitness knowledge
- Exhibits responsible personal and social behavior that respects self and others.
 - Personal responsibility
 - Accepting feedback
 - Working with others
 - Rules and etiquette
 - Safety

Lesson Objective:

Students get some physical movement while practicing some basic mathematics.

Lesson Description:

1. Lead-in:
 - a. Teacher labels each wall of the room with numbers 2, 3, 4, and 5.
 - b. Teacher prepares number cards he/she wishes to use depending on level of students.
2. Step by Step:
 - a. Students go to any of the four walls.
 - b. Teacher calls out a number that is a multiple of 2, 3, 4, or 5.
 - c. Students who are on the wall that is a factor of the number called, move to another wall. Move using movements such as the following:
 - i. Jump
 - ii. Hop
 - iii. Skip
 - iv. Walk
 - v. Lunge

Example: If teacher calls 6 students on walls 2 and 3 move to a different wall.
3. Closure:
 - a. Review mathematic concepts as needed.
 - b. Discuss benefits of taking movement breaks during academic time.

Differentiation:

- Advanced: Teacher can give two numbers and students have to add, subtract, multiply, or divide those numbers and then determine if the wall they are on is a factor of that number.
 - Example: $2 + 6$ (students on walls 2 and 4 move)
 - Example: 2×3 (students on walls 2 and 3 move)
- Struggling or Younger Students: Can do with subtraction or addition.
 - Example: $2 + \underline{\hspace{2cm}} = 5$ (students on wall 3 move)
 - Example: $5 - \underline{\hspace{2cm}} = 3$ (students on wall 2 move)