

# EISENHOWER PROFESSIONAL DEVELOPMENT PROGRAM

## Mathematics Within: Algebraic Patterns

### Lesson Plan

**Participant Name:** Kurt Alpers

**Broad Topic:** Fractions

**Subtopic:** Equivalent Fractions

**Aim:**

*Students will be able to describe parts of a fraction and make equivalent fractions.*

**Specific Objective(s):**

- o To view parts of a fraction.
- o To make equivalent fractions.
- o To reduce a fraction to lowest terms.

**Materials/Supplies:**

- o Paper and pencil
- o Colored pencils
- o Fraction Fairway game sheet

**Lesson:**

- o Introduce with "pizza story" using parts cut and parts eaten.
- o Review parts of a fraction and what each means.
- o Draw  $\frac{1}{2}$  on board. What fraction is this? Continue to add more lines to create equivalent fractions. What do you notice about how the numerators and denominators are changing?
- o Give more fractions for students to make equivalent fractions on their own. Students share their methods.
- o Make list of methods used (paper folding, draw picture, skip counting, multiplying numerator and denominator by same number).
- o Review reducing fractions to lowest terms, relating this to equivalent fraction activity above.
- o Play Fraction Fairway (page 2). Decide on a fraction for each hole (either 9 or 18). Roll 2 dice until an equivalent fraction is rolled. The number of rolls needed is the score for the hole. At the end of the round, total up the score.
- o Closure/discussion
  - What did you discover about equivalent fractions?
  - What are some ways to make equivalent fractions?
  - Return to original pizza story?

## Fraction Fairway

Hole Number	Target Fraction	Fractions Rolled	Number of Strokes
1			
2			
3			
4			
5			
6			
7			
8			
9			
<b>Total Score</b>			