

## **Liquid Measurement Game\***

The purpose of this game is to help students understand the relationship between cups, pints, quarts, half-gallons, and gallons through visualizing the relationships. A team is composed of 2 players. Each team plays another team. Each team is given a set of cards, a game board (representing 1 gallon), and a set of game pieces (cups, pints, quarts, and half-gallons).

### **Rules of the game:**

1. The cards for each team are shuffled and placed face down to start the game.
2. The first team chooses a card and if possible follows the directions on the card – adding a liquid measure to the board or taking away a liquid measure from the board. The other team then takes their turn. Teams alternate turns.
3. If the addition of a liquid measure to the board results in an amount that is equivalent to a larger liquid measure, the team must state this (“2 cups equal a pint, so we now replace the 2 cups with a pint”) and make the appropriate substitution. If they forget and the other team notices, they lose the measure just added.
4. If you are asked to return a measure that you do not have, you must state how you substitute several smaller units of measure for the equivalent larger unit.
5. To win the game you must get exactly one gallon. If the result of a card’s instruction would give you more than a gallon, you lose that turn.

Could you use this game with your students?

\* Adapted from an activity from the IMAGES (Improving Measurement and Geometry in Elementary Schools) Institutes