### **Conversion Worksheet**

Name:	

### Fill in the missing values:

Ounces	Cups	Pints	Quarts	Gallons
8 ounces	_	Х	Х	Х
	2 cups		Х	Х
24 ounces	3 cups	Х	Х	Х
	4 cups	2 pints	1 quart	Х
40 ounces	5 cups	Х	Х	Х
	6 cups		Х	Х
56 ounces		Х	Х	Х
	8 cups	4 pints		½ gallon
72 ounces	9 cups	Х	Х	Х
80 ounces			Х	Х
	11 cups	Х	Х	Х
96 ounces	12 cups	6 pints		Х
104 ounces	13 cups	Х	Х	Х
	14 cups	7 pints	Х	Х
120 ounces		Х	Х	Х
	16 cups		4 quarts	



For a dealer near you, call: (847) 573-8400 (U.S. & Int'l) (800) 222-3909 (U.S. & Canada) +44 (0)1553 762276 (U.K. & Europe)







# **Gallon Measurement Set**

The Gallon Set from Learning Resources® includes a set of five containers that have been designed to model common containers of measurement such as a gallon of milk and a carton of juice. The realistic shapes will help students relate to what is used in real life situations. Included in the set are containers to measure a gallon, half-gallon, quart, pint and a cup. Each container has increment markings of ounces, cups, quarts, pints, half-gallon, and gallon where applicable.

Use the Gallon Set to help students explore and compare liquid measurements. The set will help students visually see the differences in measurement quantities, plus help them convert between ounces, cups, quarts, pints, half-gallons, and gallons easily. The following are some suggestions on how to use the Gallon Set.

The Gallon Set is great for exploring measurement as a class or in a small learning center. The set is made out of durable plastic and is safe for students to use by themselves.

**Note:** When reading measurements using the gallon set, be aware of the meniscus. A meniscus is the curvature of the surface of the water. Water "sticks" to the walls of the containers, but only on the sides and not the middle. When you look at the surface, the water level is not straight. Measurements should be at the lowest point (see figure to the right). You need to read the meniscus at eye level in order to get an accurate reading. The containers should be placed on a table and then you should lower your head to be able to read the meniscus at eye level.



**Caution:** It is not recommended that these are used to boil water or used to hold toxic material.

## **Guess How Many? – Equivalency Challenge**

Start with the empty gallon in the front as a class. Using the half gallon, quart, pint, and cup, estimate with the class how many of each they will need to fill up the gallon. Using one container at a time, fill the gallon. Keep track of how many containers it takes to fill the gallon. Keep track of your findings with a class graph or equivalency chart like the one on the next page. This chart is great for students to use while conducting their liquid measurement

experiments. The chart can be filled in with estimates first, then filled in with exact measurements.

✓ WARNING: CHOKING HAZARD - Small parts. Not for children under 3 years.

Equivalency Chart					
	# needed to fill a gallon	# needed to fill a half-gallon	# needed to fill a quart	# needed to fill a pint	# needed to fill a cup
Gallon		Х	Х	Х	Х
Half-Gallon			Х	Х	Х
Quart				Х	Х
Pint					Х
Cup					

## **Create a Conversion Recipe**

Use recipes like the one below, to determine how many gallons they would make. Use the equivalency chart to help convert the ingredients to gallons. Recipes can be made as simple or difficult as you want depending on the skills being taught. Have the students create their own recipes using gallons, half gallons, quarts, pints and cups to challenge a partner. Encourage them to make up funny recipes to make it more interesting.

#### Sample Recipe: Bug Juice

 $\frac{1}{2}$  gallon of cranberry juice

8 cups of orange juice

4 quarts of lemon lime soda

8 pints of water

16 cups of grape juice

**Answer:** 4 gallons total

## **Conversion Challenge**

Try challenging a partner with equivalent measurement questions. Below are some example questions to use.

- 1) How many pints are in a quart?
- 2) If I had 32 cups, how many gallons would I have?
- 3) How many cups are in 7 pints?
- 4) If you add 8 oz to 7 cups, how many cups will you have?
- 5) How many quarts are in a gallon?

Conversion Table				
Ounces	Cups	Pints	Quarts	Gallons
8 ounces	1 cup	Х	Х	Х
16 ounces	2 cups	1 pint	Х	Х
24 ounces	3 cups	Х	Х	Х
32 ounces	4 cups	2 pints	1 quart	Х
40 ounces	5 cups	Х	Х	Х
48 ounces	6 cups	3 pints	Х	Х
56 ounces	7 cups	Х	Х	Х
64 ounces	8 cups	4 pints	2 quarts	½ gallon
72 ounces	9 cups	Х	Х	Х
80 ounces	10 cups	5 pints	Х	Х
88 ounces	11 cups	Х	Х	Х
96 ounces	12 cups	6 pints	3 quarts	Х
104 ounces	13 cups	Х	Х	Х
112 ounces	14 cups	7 pints	Х	Х
120 ounces	15 cups	Х	Х	Х
128 ounces	16 cups	8 pints	4 quarts	1 gallon