

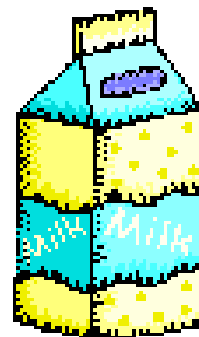
Customary Units of Capacity and Weight





Customary Units of Capacity

The most commonly used customary units of capacity are the ounce, cup, pint, quart, and gallon.





Customary Units of Capacity



1 gallon = 4 quarts



1 gallon = 128 ounces



1 quart = 2 pints

1 pint = 2 cups

1 cup = 8 ounces



Abbreviations for Customary Units of Capacity



gallon = gal



quart = qt



pint = pt

cup = c

ounces = oz



Relationship of Customary Units of Capacity





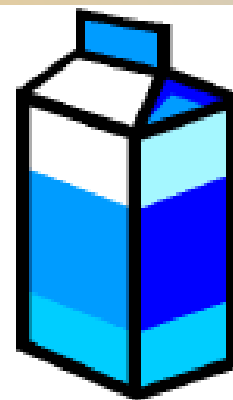
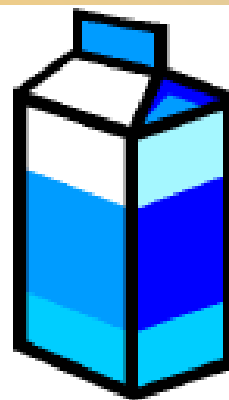
Relationship of Customary Units of Capacity



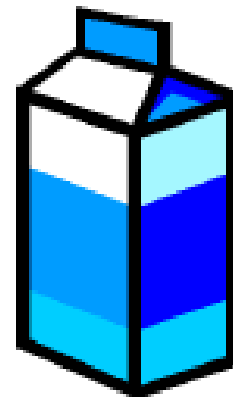
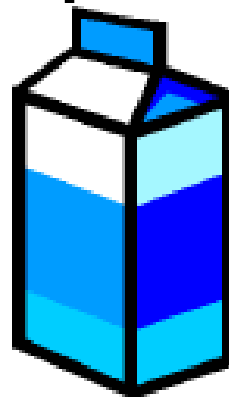
gallon



Relationship of Customary Units of Capacity



1 gallon = 4
quarts





Relationship of Customary Units of Capacity

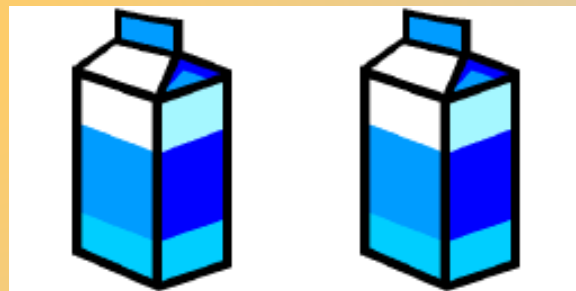
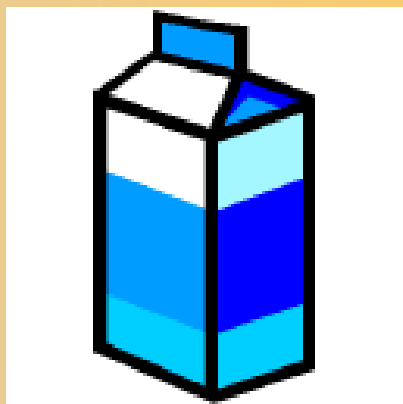


1 gallon = 4 quarts

quart	quart
quart	quart



Relationship of Customary Units of Capacity



1 quart = 2 pints



Relationship of Customary Units of Capacity



1 gal = 8 pt

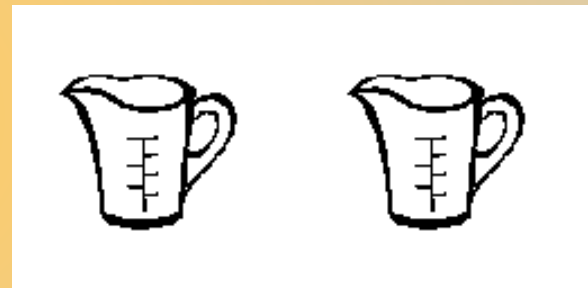


1 quart = 2 pints

pint	pint
pint	pint
pint	pint
pint	pint



Relationship of Customary Units of Capacity



1 pint = 2 cups



Relationship of Customary Units of Capacity



$$1 \text{ gal} = 8 \text{ pt}$$



$$1 \text{ gal} = 16 \text{ c}$$



$$1 \text{ pint} = 2 \text{ cups}$$

cup	cup	cup	cup
cup	cup	cup	cup
cup	cup	cup	cup
cup	cup	cup	cup



Relationship of Customary Units of Capacity



1 cup = 8 ounces



Relationship of Customary Units of Capacity



$$1 \text{ cup} = 8 \text{ ounces}$$

$$1 \text{ gal} = 8 \text{ pt}$$



$$1 \text{ gal} = 16 \text{ c}$$



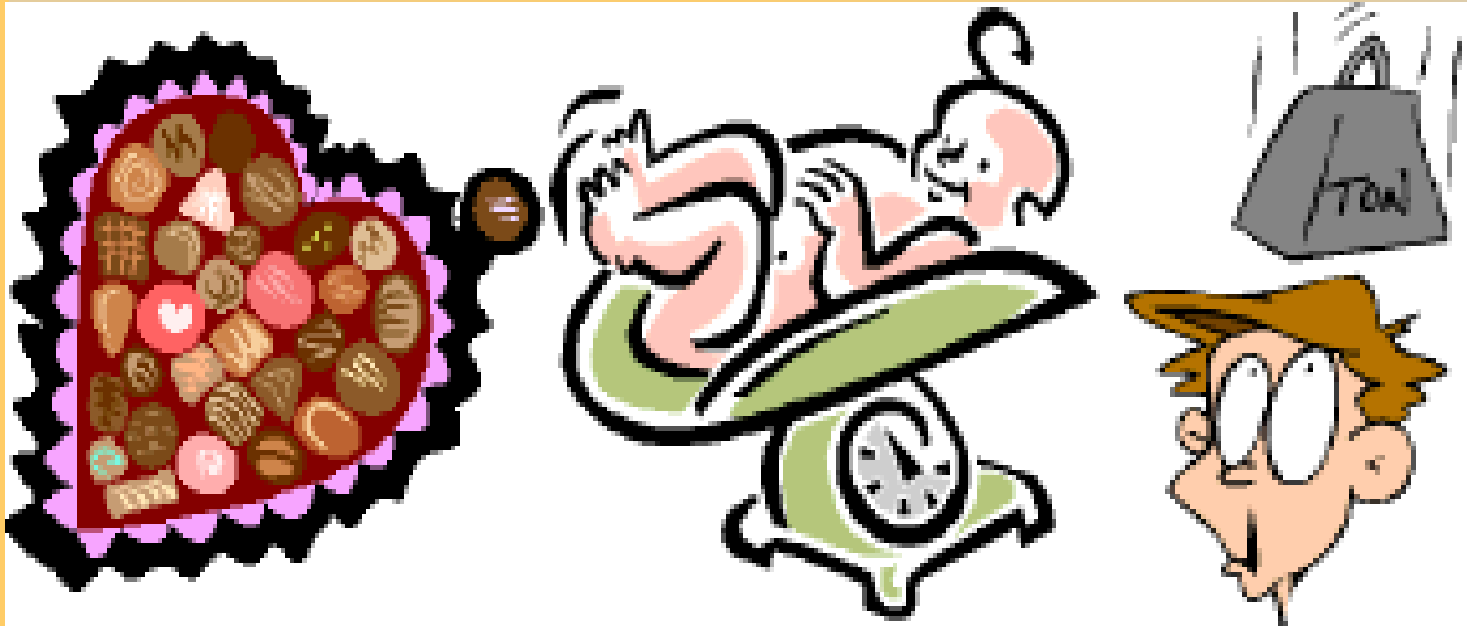
$$1 \text{ gal} = 128 \text{ oz.}$$

8 oz.	8 oz.	8 oz.	8 oz.
8 oz.	8 oz.	8 oz.	8 oz.
8 oz.	8 oz.	8 oz.	8 oz.
8 oz.	8 oz.	8 oz.	8 oz.



Customary Units of Weight

The most commonly used customary units of weight are ounce, pound, and ton.





Customary Units of Weight

1 ton = 2000 pounds

1 pound = 16 ounces



Abbreviations for Customary Units of Weight



ton = T



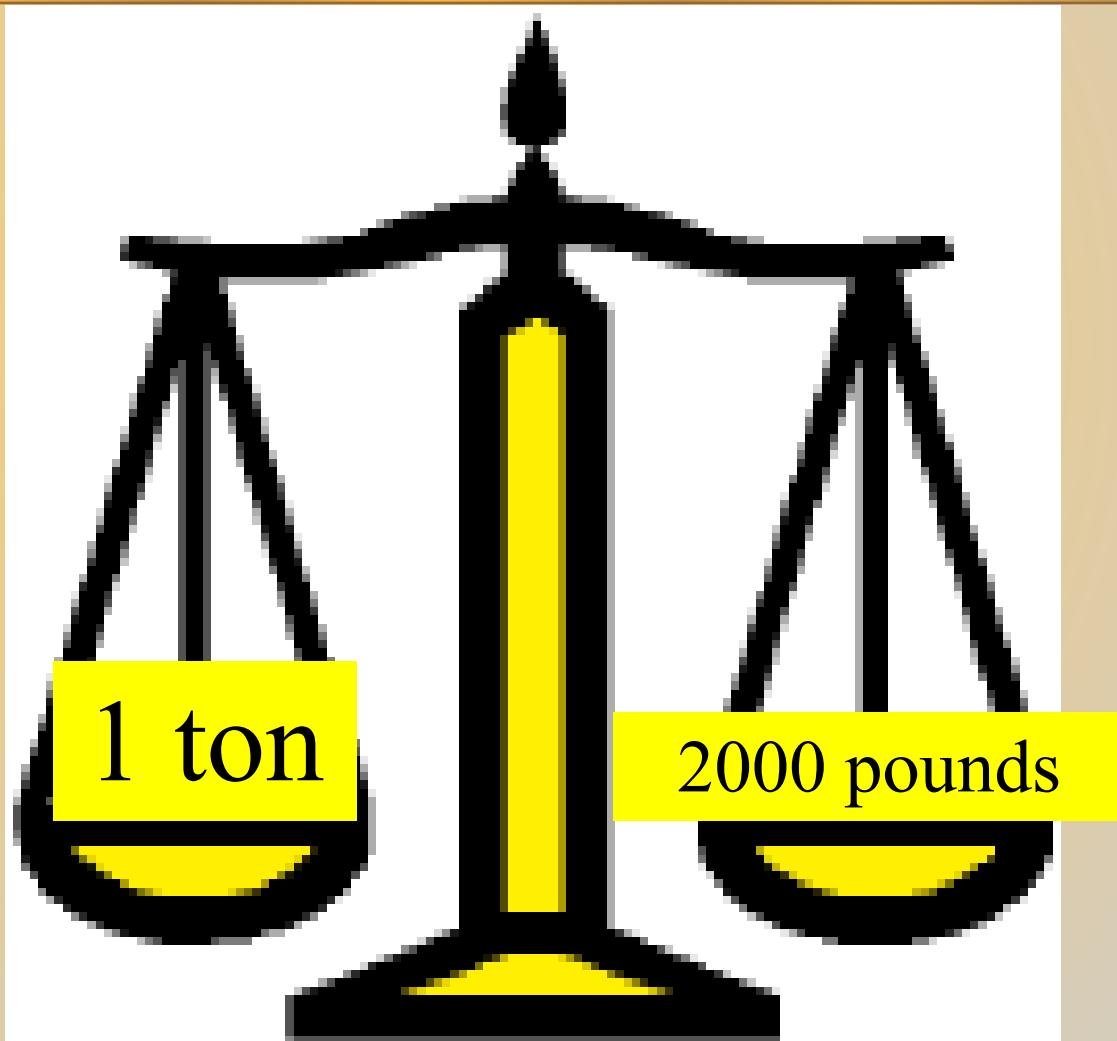
pound = lb



ounce = oz

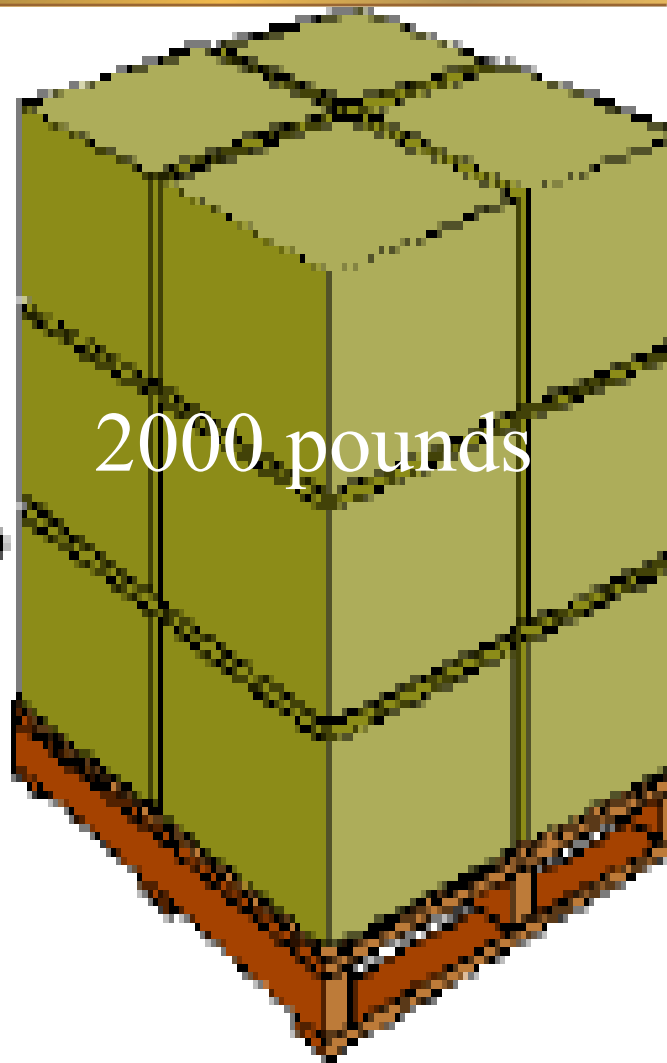
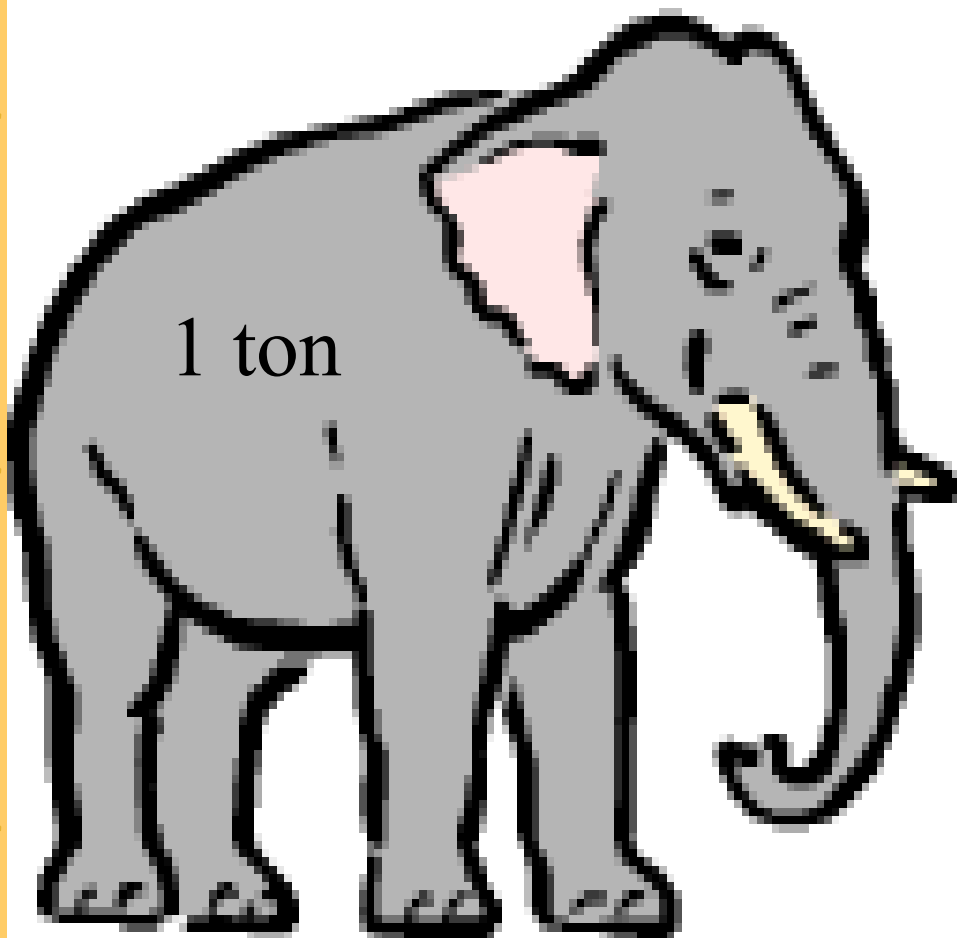


Relationship of Customary Units of Weight



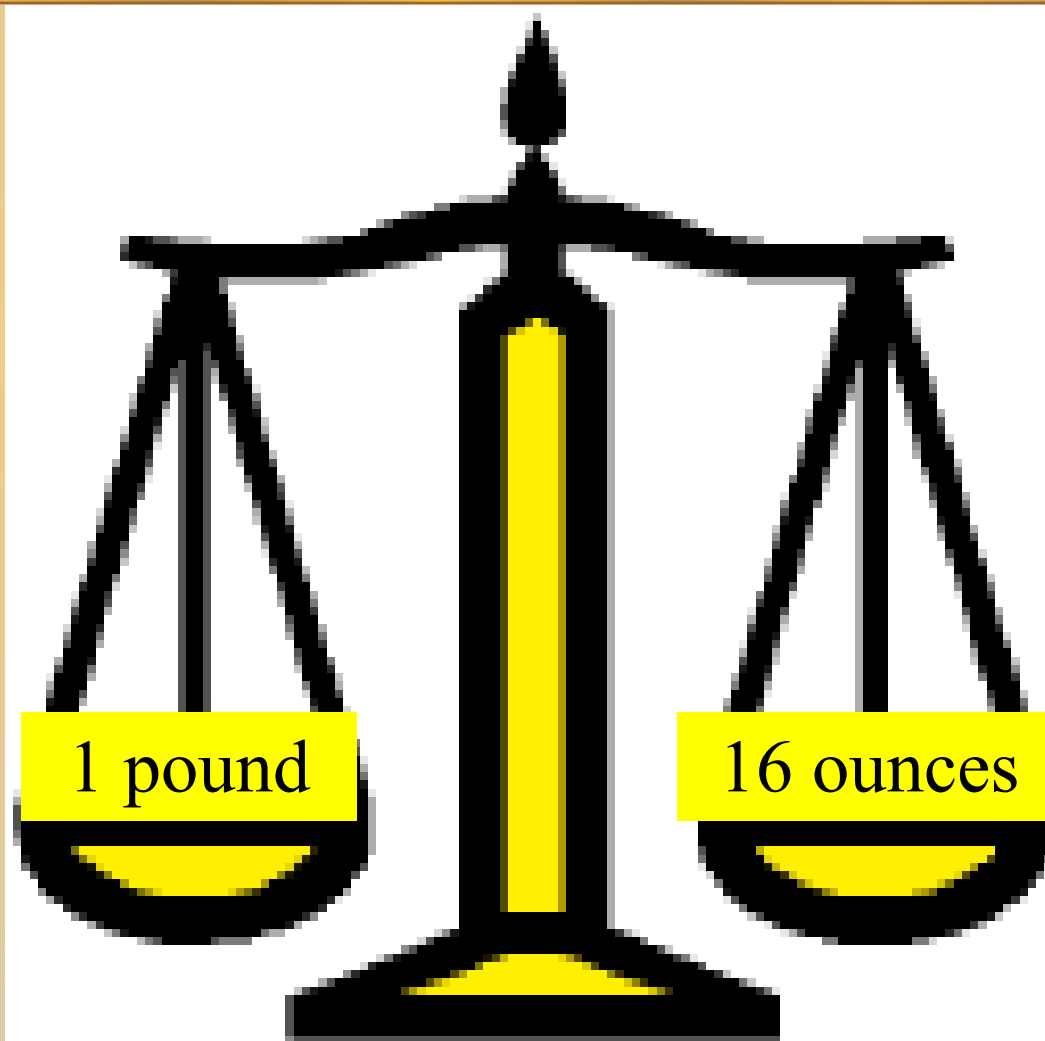


Relationship of Customary Units of Weight



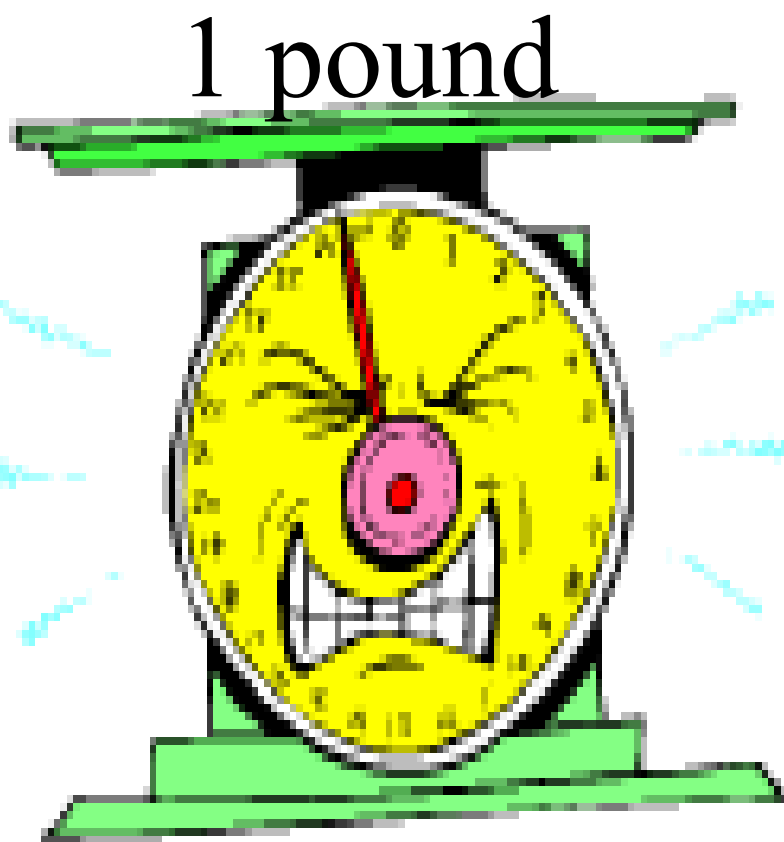


Relationship of Customary Units of Weight





Relationship of Customary Units of Weight





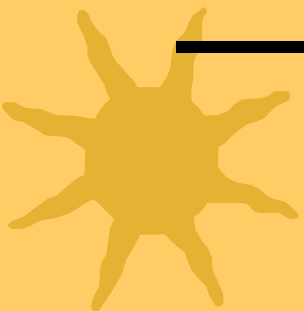
Changing Customary Units of Capacity and Weight

To change from a large customary unit of capacity or weight to a small unit of capacity or weight – use a bridge map.

Think about
equivalent units



Bridge Map



as
(just like)

Relating factor



Changing Customary Units of Capacity and Weight



$$2 \text{ gallons} = \underline{\quad 8 \quad} \text{ quarts}$$



$$1 \text{ gallon} = 4 \text{ quarts}$$

$$2 \times 4 = 8$$



$$\begin{array}{ccc} \underline{1 \text{ gallon}} & \diagup & \underline{2 \text{ gallons}} \\ 4 \text{ quarts} & & \underline{8 \text{ quarts}} \end{array}$$



Changing Customary Units of Capacity and Weight



$$4 \text{ Tons} = \underline{8000} \text{ pounds}$$

$$1 \text{ Ton} = 2000 \text{ pounds}$$

$$4 \times 2000 = 8000$$



<u>1 Ton</u>		<u>4 Tons</u>
2000 pounds		<u>8000</u> pounds



Changing Customary Units of Capacity and Weight



$$5 \text{ cups} = \underline{40} \text{ ounces}$$

$$1 \text{ cup} = 8 \text{ ounces}$$

$$5 \times 8 = 40$$





Changing Customary Units of Capacity and Weight



$$8 \text{ pounds} = \underline{128} \text{ ounces}$$

$$1 \text{ pound} = 16 \text{ ounces}$$



$$8 \times 16 = 128$$



$$\begin{array}{ccc} \underline{1 \text{ pound}} & \text{---} & \underline{8 \text{ pounds}} \\ 16 \text{ ounces} & & \underline{128} \text{ ounces} \end{array}$$



Changing Customary Units of Capacity and Weight



$$2 \frac{1}{2} \text{ Tons} = \underline{5000} \text{ pounds}$$



$$1 \text{ Ton} = 2000 \text{ pounds}$$

$$2 \times 2000 = 4000 + 1000 = 5000$$



$$\frac{1}{2} \text{ Ton} = 1000 \text{ pounds}$$

<u>1 Ton</u>		<u>2 $\frac{1}{2}$ Tons</u>
2000 pounds		<u>5000</u> pounds



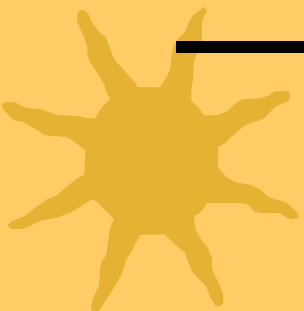
Changing Customary Units of Capacity and Weight

To change from a small customary unit of capacity or weight to a large unit of capacity or weight – use a bridge map.

Think about
equivalent units



Bridge Map



as
(just like)

Relating factor



Changing Customary Units of Capacity and Weight



$$24 \text{ quarts} = \underline{\quad 6 \quad} \text{ gallons}$$



$$4 \text{ qt} = 1 \text{ gal}$$

$$24 \div 4 = 6$$



$$\begin{array}{ccc} \underline{4 \text{ quarts}} & \diagup & \underline{24 \text{ quarts}} \\ 1 \text{ gallon} & & \underline{6} \text{ gallons} \end{array}$$



Changing Customary Units of Capacity and Weight




$$64 \text{ ounces} = \underline{\quad 4 \quad} \text{ pounds}$$



$$16 \text{ ounces} = 1 \text{ pound}$$

$$64 \div 16 = 4$$



16 ounces		64 ounces
<u>1</u> pound		<u>4</u> pound



Changing Customary Units of Capacity and Weight



$$10 \text{ pints} = \underline{5} \text{ quarts}$$



$$2 \text{ pints} = 1 \text{ quart}$$

$$10 \div 2 = 5$$



$$\begin{array}{ccc} \underline{2 \text{ pints}} & \diagup & \underline{10 \text{ pints}} \\ 1 \text{ quart} & & \underline{5} \text{ quarts} \end{array}$$



Changing Customary Units of Capacity and Weight

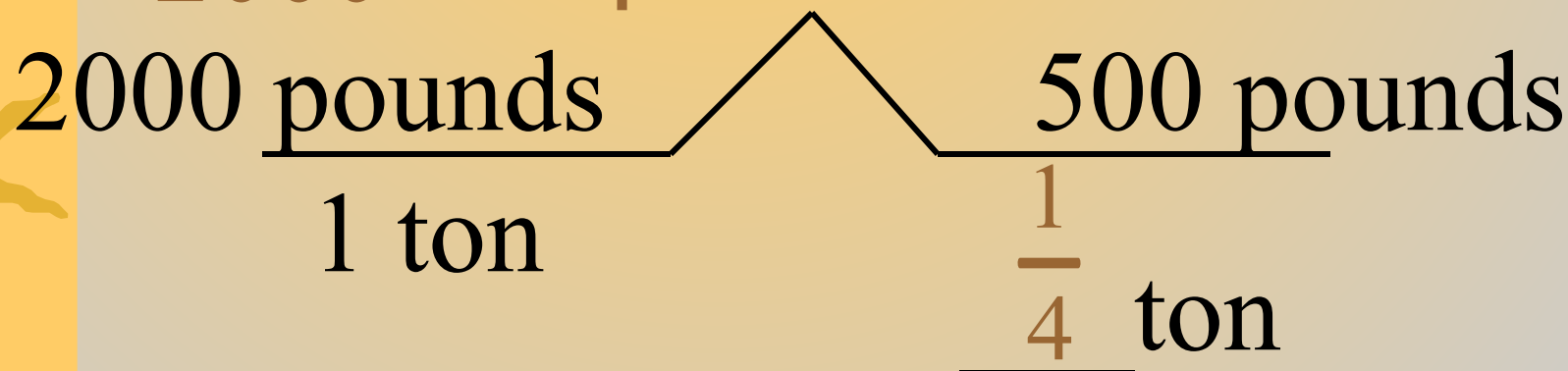


$$500 \text{ pounds} = \underline{\frac{1}{4}} \text{ ton}$$



$$1 \text{ ton} = 2000 \text{ pounds}$$

$$\frac{500}{2000} = \frac{1}{4}$$





Changing Customary Units of Capacity and Weight




$$32 \text{ cups} = \underline{\quad 2 \quad} \text{ gallons}$$



$$16 \text{ cups} = 1 \text{ gallon}$$

$$32 \div 16 = 2$$



<u>16 cups</u>		<u>32 cups</u>
1 gallon		<u>2</u> gallons