

**Question 1****RUBRIC**

Score	Description
4	Response demonstrates thorough understanding of converting measurement units. <ul style="list-style-type: none">• Assign 2 points for correct conversion.• Assign 1 point for correct explanation or strategy.• Assign 1 point for correct number of packages.

SAMPLE RESPONSE

a. $171 \text{ tsp} \div 3 \text{ tsp per tbsp} = 57 \text{ tsp}$; $57 \text{ tsp} \div 2 \text{ tbsp per oz} = 28.5 \text{ oz}$

b. four 8-oz packages

Question 2**RUBRIC**

Score	Description
4	Response demonstrates thorough understanding of converting measurement units. <ul style="list-style-type: none">• Assign 2 points for correct conversion.• Assign 1 point for correct explanation or strategy.• Assign 1 point for correct number of packages.

SAMPLE RESPONSE

a. $\frac{2}{3} \text{ cups} = \frac{2}{3} \times 16 \text{ tbsp per c} = 10 \frac{2}{3} \text{ tbsp}$ x $\frac{1}{2} \text{ oz per tbsp} = 5 \frac{1}{3} \text{ oz}$

OR

$32 \text{ tsp} \div 3 \text{ tsp per tbsp} = \frac{2}{3} \text{ tbsp}$; $10 \frac{2}{3} \text{ tbsp} \div 2 \text{ tbsp per oz} = 5 \frac{1}{3} \text{ oz}$

b. one 8-oz package.

Question 3**RUBRIC**

Score	Description
3	Response demonstrates thorough understanding of converting measurement units. <ul style="list-style-type: none">• Assign 1 point for correct conversion.• Assign 1 point for correct explanation or strategy.• Assign 1 point for correct number of packages.

SAMPLE RESPONSE

a. $10 \text{ lb} + 1 \text{ cup} + 42 \text{ lb} + 7 \text{ lb} + 1 \text{ cup} + 6 \text{ tbsp} = 59 \text{ lb} + 2 \text{ cup} + 6 \text{ tbsp} = 60 \text{ lb} + \frac{3}{4} \text{ cup};$

OR

$$120 \frac{3}{4} \text{ c} \div 2 \text{ c per lb} = 60 \frac{3}{8} \text{ cups}$$

b. sixty-one 1-lb packages

Question 4**RUBRIC**

Score	Description
3	Response demonstrates thorough understanding of converting measurement units. <ul style="list-style-type: none">• Assign 1 point for correct conversion.• Assign 1 point for correct explanation or strategy.• Assign 1 point for correct number of packages.

SAMPLE RESPONSE

a. $17 \text{ cups} \div 2 \text{ cups per pound} = 8 \frac{1}{2} \text{ pounds}$

b. nine 1-lb packages

Question 5**RUBRIC**

Score	Description
3	Response demonstrates thorough understanding of converting measurement units. <ul style="list-style-type: none">• Assign 2 points for correct conversion.• Assign 1 point for correct explanation or strategy.• Assign 1 point for correct number of packages.

SAMPLE RESPONSE

a. $42 \text{ tbsp} \div 16 \text{ tbsp per cup} = 2 \frac{5}{8} \text{ cups};$

$$21 \text{ cups} + 2 \frac{5}{8} \text{ cups} = 23 \frac{5}{8} \text{ cups}$$

$$23 \frac{5}{8} \div 16 = 1 \text{ gallon and } 7 \frac{5}{8} \text{ cups or } 1 \frac{61}{128} \text{ gallon}$$

b. three $\frac{1}{2}$ -gallon bottles

Question 6**RUBRIC**

Score	Description
3	<ul style="list-style-type: none">• Assign 1 point for correct conversion.• Assign 1 point for correct explanation or strategy.• Assign 1 point for correct number of packages.

SAMPLE RESPONSE

a. $16 \text{ cups} \div 3 \frac{3}{4} = 4 \frac{4}{15}$

b. five 1-lb packages

Question 7**RUBRIC**

Score	Description
3	Response demonstrates thorough understanding of converting measurement units. <ul style="list-style-type: none">• Assign 1 point for correct conversion.• Assign 1 point for correct explanation or strategy.• Assign 1 point for correct number of packages.

SAMPLE RESPONSE

a. $89 \text{ lb} + 2\frac{1}{4} \text{ cups} + 5 \text{ lb} + 2\frac{1}{4} \text{ cups} = 95 + 4\frac{1}{2} \text{ cups} = 94 \text{ lb} + 1 \text{ lb} + \frac{3}{4} \text{ cup} = 95 \text{ lb} + \frac{3}{4} \text{ cups};$

OR

$357 \text{ c} \div 3\frac{3}{4} \text{ cup per lb} = 95\frac{1}{5} \text{ lb}$

b. ninety-six 1-lb packages

Question 8**RUBRIC**

Score	Description
2	Response demonstrates thorough understanding of converting measurement units. <ul style="list-style-type: none">• Assign 1 point for correct conversion.• Assign 1 point for correct explanation or strategy.

SAMPLE RESPONSE

$152 \div 12 \text{ eggs per dozen} = 12\frac{2}{3} \text{ dozen}$

13 dozen

Question 9**RUBRIC**

Score	Description
3	Response demonstrates thorough understanding of converting measurement units. <ul style="list-style-type: none">• Assign 1 point for correct conversion.• Assign 1 point for correct explanation or strategy.• Assign 1 point for correct number of packages.

SAMPLE RESPONSE

a. $162 \text{ c} = 162 \text{ c} \div 3 \frac{1}{3} \text{ cups per lb} = 48 \frac{6}{10} \text{ lb}$ (or $48 \frac{3}{5} \text{ lb}$ or $48 \text{ lb} + 2 \text{ cups}$)

b. forty-nine 1-lb packages

Question 10**RUBRIC**

Score	Description
3	Response demonstrates thorough understanding of converting measurement units. <ul style="list-style-type: none">• Assign 1 point for correct conversion.• Assign 1 point for correct explanation or strategy.• Assign 1 point for correct number of packages.

SAMPLE RESPONSE

a. $16 \text{ lb} + 21 \text{ lb} + 17 \text{ lb} + 5 \frac{1}{2} \text{ cups} = 54 + 2 \text{ lb} + 1 \frac{1}{2} \text{ cups} = 56 \text{ lb} + 1 \frac{1}{2} \text{ cups}$

$5 \frac{1}{2} \text{ cups} \div 2 \text{ cup per lb} = 2 \text{ lb} + 1 \frac{1}{2} \text{ cups}$

OR

$113 \frac{1}{4} \div 2 \text{ cup per lb} = 56 \frac{5}{8} \text{ lb}$

b. fifty-seven 1-lb packages

Question 11**RUBRIC**

Score	Description
3	Response demonstrates thorough understanding of converting measurement units. <ul style="list-style-type: none">• Assign 1 point for correct conversion.• Assign 1 point for correct explanation or strategy.• Assign 1 point for correct number of packages.

SAMPLE RESPONSE

a. $5\frac{1}{4} \text{ cups} \div 2 = 2\frac{5}{8} \text{ pints}$

b. three 1-pint bottles

Question 12**RUBRIC**

Score	Description
3	Response demonstrates thorough understanding of converting measurement units. <ul style="list-style-type: none">• Assign 1 point for correct conversion.• Assign 1 point for correct explanation or strategy.• Assign 1 point for correct number of packages.

SAMPLE RESPONSE

a. $42\frac{1}{2} \text{ tbsp} \div 2 = 21\frac{1}{4} \text{ fluid ounces}$

b. $21\frac{1}{4} \div 8 = 2\frac{21}{32}$. Three 8-fluid ounce bottles.

Question 13**RUBRIC**

Score	Description
1	Response demonstrates thorough understanding of converting measurement units. <ul style="list-style-type: none">• Assign 1 point for correct number of lemons.

SAMPLE RESPONSE

34 tbsp or 34 lemons

Question 14**RUBRIC**

Score	Description
3	Response demonstrates thorough understanding of converting measurement units. <ul style="list-style-type: none">• Assign 2 points for correct conversion.• Assign 1 point for correct explanation or strategy.

SAMPLE RESPONSE

$$2 \text{ gallons} + 17 \text{ cups} + 15\frac{3}{4} \text{ cups} = 2 \text{ gallons} + 32 \text{ cups} + \frac{3}{4} \text{ cup} = 2 \text{ gallons} + 2 \text{ gallons} + \frac{3}{4} \text{ cup} = 4 \text{ gallons} + \frac{3}{4} \text{ cup}$$

OR

$$49 \text{ c} + 252 \text{ tbsp} = 49 \text{ c} + (252 \text{ tbsp} \div 16 \text{ tbsp per cup}) = 49 \text{ c} + 15\frac{3}{4} \text{ c} = 64\frac{3}{4} \text{ c}$$

$$64\frac{3}{4} \text{ c} \div 16 = 4 \text{ gallon} + \frac{3}{4} \text{ cup or } 4\frac{3}{64} \text{ gallons}$$

$$4\frac{1}{2} \text{ gallons of milk (four 1-gallon bottles} + 1\frac{1}{2}\text{-gallon bottle OR nine } \frac{1}{2}\text{-gallon bottles)}$$

Question 15**RUBRIC**

Score	Description
4	Response demonstrates thorough understanding of converting measurement units. <ul style="list-style-type: none">• Assign 2 points for correct conversion.• Assign 1 point for correct explanation or strategy.• Assign 1 point for correct number of packages.

SAMPLE RESPONSE

a. $97\frac{1}{2} \text{ tsp} \div 3 \text{ tsp per tbsp} = 32\frac{1}{2} \text{ tbsp}$; $32\frac{1}{2} \text{ tbsp} \div 2 \text{ tbsp per oz} = 16.25 \text{ oz}$

b. three 8-oz packages

Question 16**RUBRIC**

Score	Description
3	Response demonstrates thorough understanding of converting measurement units. <ul style="list-style-type: none">• Assign 1 point for correct conversion.

SAMPLE RESPONSE

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

Question 17**RUBRIC**

Score	Description
3	Response demonstrates thorough understanding of converting measurement units. <ul style="list-style-type: none">• Assign 2 points for correct conversions.• Assign 1 point for correct explanation or strategy.

SAMPLE RESPONSE

$84 \text{ tbsp} + 112 \text{ tsp} = 84 \text{ tbsp} + (112 \text{ tsp} \div 3 \text{ tsp per tbsp}) = 84 \text{ tbsp} + 37\frac{1}{3} \text{ tbsp} = 121\frac{1}{3} \text{ tbsp} \div 16 \text{ tbsp per cup} = 7\frac{7}{12}$ or a little more than $7\frac{1}{2}$ cups

Question 18**RUBRIC**

Score	Description
1	Response demonstrates thorough understanding of converting measurement units. <ul style="list-style-type: none">• Assign 1 point for correct conversion.

SAMPLE RESPONSE

2 cups or 1 pint

Question 19**RUBRIC**

Score	Description
5	Response demonstrates thorough understanding of volume of right rectangular prisms. <ul style="list-style-type: none">• Assign 1 point each for parts a through e. (5 points)

SAMPLE RESPONSE**Box 1:**

a. 30 inches x 18 inches x 6 inches = 3,240 cubic inches

b. 3 inches x 3 inches x 3 inches = 27 cubic inches

c. $3,240 \div 27 = 120$ cupcake boxes

or

Divide each dimension by 3: $10 \times 6 \times 2 = 120$ cupcake boxes

Box 2:

d. 15 inches x 18 inches x 6 inches

Divide each dimension by 3: $5 \times 6 \times 2 = 60$

e. In 12 of Box 1, I can fit 1,440 cupcakes. ($12 \times 120 = 1,440$)

In 1 Box 2, I can pack the remaining 60 cupcakes.