Mary is having a party. She is making her special popcorn for her friends but she needs a double batch. Can you help Mary double her recipe? Her sister would like some popcorn too. Can you calculate 1/4 of the recipe for Mary’s sister? Multiply each ingredient’s amount by 2, and by 1/4.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Measurement</th>
<th>x 2</th>
<th>x 1/4</th>
</tr>
</thead>
<tbody>
<tr>
<td>popcorn</td>
<td>4 cups</td>
<td>_______</td>
<td>_______</td>
</tr>
<tr>
<td>butter</td>
<td>1 tbsp</td>
<td>_______</td>
<td>_______</td>
</tr>
<tr>
<td>brown sugar</td>
<td>1 cup</td>
<td>_______</td>
<td>_______</td>
</tr>
<tr>
<td>water</td>
<td>1/2 cup</td>
<td>_______</td>
<td>_______</td>
</tr>
<tr>
<td>maple syrup</td>
<td>1/4 cup</td>
<td>_______</td>
<td>_______</td>
</tr>
<tr>
<td>salt</td>
<td>1 tsp</td>
<td>_______</td>
<td>_______</td>
</tr>
</tbody>
</table>

MAPLE POPCORN SQUARES
Makes about 3 dozen 2-inch squares

1 cup brown sugar 1/4 cup maple syrup 1/2 cup water 1 tsp salt 1 tbsp. butter 1 quart popped corn

Cook sugar, syrup, water and salt to 280 º (brittle). Add butter and cook slowly to 294º. Meanwhile, grind popped corn coarsely through a meat grinder or chop in chopping bowl. When syrup is cooked, remove from heat and stir in popcorn. Pour onto oiled marble between irons. Roll with an oiled rolling pin. Cut into squares or bars.
Bill wants muffins for breakfast, so his mom is making maple muffins. Her recipe yields 6 muffins, but she only wants to make 3. Can you halve this recipe so Bill can have muffins for breakfast? His mom also wants to triple the recipe for a family camp out. Can you help her with that? Multiply each ingredient’s amount by 1/2 and by 3 to help Bill’s mom.

MAPLE MUFFINS
Makes 1/2 dozen muffins

1 3/4 cups flour
1/4 cup maple syrup
1/4 cup milk
1/4 tsp salt
1/4 cup oil
1 egg
3 tsp baking powder

Beat egg; add milk. In separate bowl combine flour, baking powder and salt. Add dry ingredients to milk and egg mixture with maple syrup. Add oil. Bake in greased muffin pan for 20 minutes at 350 °.
Kristin is bringing her favorite maple topping to school for snack day. This recipe feeds 20 people, but she only needs to feed 10. Can you help her halve this recipe? She would also like to make some for 5 of her friends. Can you help her to make a quarter of this recipe as well? Multiply each ingredient’s amount by 1/4 and by 1/2 to calculate how much Kristin needs.

### MAPLE PECAN ICE CREAM TOPPING

3/4 cup firmly packed light brown sugar  
1/4 cup water  
3 tbsp maple syrup  
2 tbsp butter  
1/4 cup whipping cream  
1/2 cup chopped pecans

Cook top three ingredients in a saucepan over medium heat, stirring constantly for 6-8 minutes or until a candy thermometer registers 234º (soft ball stage). Remove from heat, stir in butter. Cool. Stir in pecans and whipping cream. Store in refrigerator up to three weeks. Serve warm over ice cream.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Measurement</th>
<th>x 1/4</th>
<th>x 1/2</th>
</tr>
</thead>
<tbody>
<tr>
<td>brown sugar</td>
<td>3/4 cups</td>
<td></td>
<td></td>
</tr>
<tr>
<td>water</td>
<td>1/4 cup</td>
<td></td>
<td></td>
</tr>
<tr>
<td>maple syrup</td>
<td>3 tbsp</td>
<td></td>
<td></td>
</tr>
<tr>
<td>butter</td>
<td>2 tbsp</td>
<td></td>
<td></td>
</tr>
<tr>
<td>whipping cream</td>
<td>1/4 cup</td>
<td></td>
<td></td>
</tr>
<tr>
<td>chopped pecans</td>
<td>1/2 cup</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Ann’s mom is making Maple Chicken for a sick friend. She wants to make two batches. The first batch is for her friend to eat right away. So Ann’s mom needs to make the recipe smaller. Can you help her? The second batch is for her friend to put in the freezer for a later date. Ann’s mom wants to triple the recipe for that. Help her calculate the correct amounts for each batch. Multiply each ingredient’s amount by $\frac{2}{5}$ and by 3.

### MAPLE CHICKEN

1 chicken, 3 1/2 lbs  
1/2 cup maple syrup  
2 tsp lemon juice  
1/4 cup chopped onion  
1/4 cup butter (melted)  
1/2 tsp lemon rind

Place cut up chicken in baking pan. Mix all remaining ingredients and pour over chicken. Bake it uncovered for 50-60 minutes at 400º until done. Baste frequently. Makes four servings.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Measurement</th>
<th>$\times \frac{2}{5}$</th>
<th>$\times 3$</th>
</tr>
</thead>
<tbody>
<tr>
<td>chicken</td>
<td>3 1/2 lbs</td>
<td>______ lbs</td>
<td>______ lbs</td>
</tr>
<tr>
<td>chopped onions</td>
<td>1/4 cup</td>
<td>______ cups</td>
<td>______ cups</td>
</tr>
<tr>
<td>maple syrup</td>
<td>1/2 cup</td>
<td>______ cups</td>
<td>______ cups</td>
</tr>
<tr>
<td>butter</td>
<td>1/4 cup</td>
<td>______ cups</td>
<td>______ cups</td>
</tr>
<tr>
<td>lemon juice</td>
<td>2 tsp</td>
<td>______ tsp</td>
<td>______ tsp</td>
</tr>
<tr>
<td>lemon rind</td>
<td>1/2 tsp</td>
<td>______ tsp</td>
<td>______ tsp</td>
</tr>
</tbody>
</table>
Maple Treats - Maple Products Fractions

Use the pictures to answer the questions below.

What fraction of the maple products are maple leaf candies?

What fraction of the maple products are pancakes?

What fraction of the maple products are maple cream jars?

What fraction of the maple products are maple suckers?

What fraction of the maple products are maple syrup jugs?
Maple Treats - Tapping Probability

Find the portion of the tree that each tap occupies and use your knowledge of degrees and fractions to answer the following questions about probability. Remember, probability is the likelihood that a given outcome will occur. It is expressed as a fraction. Reduce your fractions.

A = 10° / 360° or
B = 20° / 360° or
C = 20° / 360° or
D = 90° / 360° or
E = 180° / 360° or
F = 40° / 360° or

Is the next tap drilled into the tree likely to hit a vowel or consonant section? __________

What is the probability that the next tap goes into section B or section C? __________

Which sections have a probability less than or equal to 1/6 that they will be tapped? __________

What is the probability that the next tap hole goes into one of them? __________
There are three main ways to use commas.

To separate words in a list or series.

syrup, maple cream, maple candy

To separate a word at the beginning from the rest of the sentence.

Yes, I like maple trees.

To set a person apart from the rest of the sentence.

Jim, do you like maple on your pancakes?

Add commas where needed to the sentences below.

Hint: if you’re stuck, read the sentence aloud and insert a comma wherever you pause.

I bought coffee maple syrup and maple cream at the grocery store.

Tim had ice cream with maple syrup nuts and banana.

Well I don’t like maple syrup.

I don’t like oatmeal but I do like pancakes with maple syrup.

Read the paragraph below. Insert commas where necessary.

Making a maple gift basket is easy. First choose the basket you want to use. You might want to fill it with maple syrup maple suckers and pancake mix. If you choose a tall basket you will need more products to fill it. Next decide what filler will look best in the basket. Add maple products until the basket looks full. Finally wrap the basket in clear shrink wrap.
The sentence tightener takes word pairs and shrinks them into single words, like tightening up maple tubing so it flows better. Underline the words that make up each contraction and rewrite each sentence with the proper contractions.

Who is going to pick up the maple syrup for supper?

____________________________________

That is the same sugarhouse we would have gone to if it had not snowed last night.

____________________________________

We will not make it to the pancake supper on time if the snow plow does not arrive soon.

____________________________________

Who is the new maple producer at the farmer’s market and what is her name?

____________________________________

I can not believe we ran out of maple cream before breakfast was finished.

____________________________________
Maple Treats -
Sentence Tightener

The sentence tightener takes word pairs and shrinks them into single words, like tightening up maple tubing so it flows better. Underline the words that make up each contraction and rewrite each sentence with the proper contractions.

How did Jon manage to tap 400 taps in one day?

____________________________________
____________________________________

That is where the sap comes out of the line that it entered at the tree.

____________________________________

Sap will not come out of the tree until the temperature rises.

____________________________________

Mrs. Ward said that she had forgotten her gloves at the sugarhouse.

____________________________________

We have been walking this trail for an hour and we still have not found the old sugarhouse.
Maple Treats - Maple Metrics

Name ____________________________

Use the chart below to convert the given measurement to the measurement asked for.

| 1 gram (g) = 1000 milligrams (mg) | 1000 grams (g) = 1 kilogram (kg) |

If you have 200 g of maple sugar how many mg do you have? ______

If you have 350 g of maple candy how many mg do you have? ______

If you have 1500 g of maple cotton how many kg do you have? ______

If you have 1 kg of maple syrup how many mg do you have? ______
Maple Treats -
Maple Secret in Pre-Algebra

Solve each equation for x. Then write the answer into the puzzle with the corresponding letter.

1. $10 + x = 15$       L
2. $3 + 2x = 15$       B
3. $2x - 4 = 4$         O
4. $2 + 3x = 8$         F
5. $9 + x = 18$       M
6. $2x + 7 = 9$       S
7. $x - 5 = 3$         P
8. $5 + 3x = 14$       E
9. $3x - 9 = 12$       A
10. $11 + 2x = 31$     T

What is the second most tapped tree for maple syrup?

6 3 4 10 5 9 7 1 8
Maple Treats -
Metric Measurement

Use the chart below to answer the following questions.

| 1 ounce (oz) = 28.35 grams (g) | 1 gram (g) = 0.035 ounces (oz) |
| 1 pound (lb) = 0.45 kilograms (kg) | 1 kilogram (kg) = 2.21 pounds (lb) |

1. Patty is making maple candies. She makes one 4 oz portion. How many grams are in that portion? ______

2. She makes another batch of candy that is 0.225 kilograms. How many pounds are in that portion? ______

3. Patty then makes a batch that weighs 85 grams. How many ounces of candy is that? ______

2. She makes a large batch of maple cream that is 16 ounces. How many grams are in that portion? ______

How many kilograms is that? ______
Maple Treats -
Beginning Algebra

Solve each equation for x. Then write the answer into the puzzle with the corresponding letter.

1. $8 + x = 16$  S
2. $x - 10 = 0$  C
3. $2x + 5 = 9$  Y
4. $9 + 2x = 17$  A
5. $3x - 6 = 3$  E
6. $2x - 8 = 6$  P
7. $4 + 3x = 7$  L
8. $4x - 4 = 16$  M
9. $6 + 2x = 24$  N
10. $3x + 5 = 23$  O

Where can you go to see some interesting maple videos?

9   3   1   8   4   6   7   5   2   10   8
Maple Treats -
Percents and Decimals

Add the decimals. Convert each answer to a percentage. Then write the corresponding letter into the puzzle with the matching percentage.

Where's a great place to take a hike?

98%  84%  89%  78%  43%  27%  56%  98%  9%  43%  61%  78%  37%
Adjectives describe nouns and pronouns. Underline the adjectives in the following sentences.

She went home after the hard work of tapping maple trees.
The tank looked like it was full of clear water but it was maple sap.
The beautiful flowers decorated the table where the family ate maple muffins.
Where did the happy cook store his maple sugar?
The red, white, and blue flag waved in the soft breeze over the sugarhouse.
My lazy cat sits in the bright sun to watch the steam rise from the evaporator.

Write an adjective in each blank to complete the sentences below.

The _______________ boots were left outside the sugarhouse.
Paul want his ___________ tractor to start before the ___________ snow.
We ate a ___________ breakfast with pancakes and maple syrup.
My _____________ sister likes maple cream on her pancakes.

The underlined adjectives in the following sentences are scrambled. Change the adjectives to make the sentence correct.

The nowbr ___________ horse was pulling the sleigh loaded with sap.
I want to buy a wen _______ evaporator so I can boil my sap faster.
The regla ________ bucket of maple candy was eaten up by at Maple Weekend.
Laura likes to admire the isledouci _______________ maple cotton candy.
Without chlorophyll and photosynthesis there could be no maple syrup production. The plant takes carbon dioxide from the atmosphere and combines it with water to make sugar. The sugar will dissolve in the water in the tree to create sweet sap. It is necessary for the tree branches to freeze followed by a thaw so the sap can be pushed out of the tree through the tap hole into the maple tubing where the sap can be collected and processed. The water in the tree came from groundwater pulled into the tree from the roots when the branches were below freezing. This system in maple trees continues benefitting everyone who finds maple syrup desirable. These weather conditions make sap run best in the spring.
Maple Treats - Welcome to Maple Market

Calculate the cost of each item in a package. Show your work.

A box of large maple suckers costs $15. There are 5 suckers in a box. How much does each maple sucker cost?

A bag of maple leaf candy costs $8. There are 16 candies in a bag. How much does each piece of candy cost?

A crate of maple syrup pints costs $72. There are 6 pints of maple syrup in each crate. How much does each maple syrup pint cost?

Ken is a maple producer. He wants to serve pancakes on Maple Weekend. 12 bags of pancake mix costs $30. How much does each bag cost? If a bag can serve 25 people, how many can the whole box of 12 bags serve? How much would the pancake mix cost to serve each person?
The Sugar maple is named for the high Sugar content in its sap. Its leaves are Five lobed green in the summer and Orange or Yellow in the Fall. Maple Trees grow bet where there is lots of rain and well drained soil. If the sugarbush has too many trees in an Area so they are two crowded the sap will be less sweet. States with the most sugar maple trees are New York, Michigan, Wisconsin, Pennsylvania, Vermont and Maine.
Maple Treats -
Scrambled Maple Spelling

Find the spelling words in **bold italic** in the following sentences and correct the spelling in the list below.

Maple syrup is made in **northern** states because the **atmosphere** there provides more **tolerable** conditions for sugar maple trees to **succeed**.

Maple sap is often **concentrated** using an **osmosis membrane**. This **technique** is **desirable** as it saves time and uses much less energy than just boiling.

Exactly when maple sap will flow is **unpredictable**, usually **appearing** in **February** or March **corresponding** with temperatures above **freezing** after the cold **January** weather.

chuenqoit  ____________________  blotreela  ____________________
rrauefby  ____________________  aginparep  ____________________
snoiticdon  ____________________  yanjura  ____________________
thornner  ____________________  missoos  ____________________
grefeinz  ____________________  reeadibles  ____________________
bnemarem  ____________________  grecrnnispod  ____________________
thapsomeer  ____________________  trecodnenecant  ____________________
beltacinupder  ____________________  cudesec  ____________________
Maple Production -
Hidden at Breakfast

Find the following hidden objects in the picture below:
banana, needle, fish, toothbrush, paper clip, duck, boot, bell, tack, pencil, star
Maple Production -
Hidden at Breakfast

Find the following hidden objects in the picture below:
banana, needle, fish, toothbrush, paper clip, duck, boot, bell, tack, pencil, star