Families:
Pilot Light Family Meal Lessons are designed to easily bring food education into your home. We recommend using the Family Resources in the following way:
1. Watch the Family Meal video for the lesson as a family.
2. Make the recipe as a family.
3. In the Common Core Connections section, children can learn through and about food while strengthening Common Core English Language Arts or Math skills.
4. Family Discussion questions and Extension Activities are provided to allow learners of all ages opportunities to participate in the learning experience!

Pilot Light Family Meal Lesson
Carrot Hummus Dip
+ Grades 1-4 Common Core Math - Operations and Algebraic Thinking

Suggested Recipe Age Range: 6 and up (with adult supervision)

Recipe by Chef Lydia Burns:

Carrot Hummus Dip

Ingredients:
- 1 pound (bag) of carrots
- 2 garlic cloves (or more if you prefer)
- 1 inch nub of fresh ginger
- 3 1/2 tablespoons extra virgin olive oil (or sub an oil of your choice, sunflower, or grape seed oil are good neutral alternatives)
- 1/4 cup white wine vinegar (or sub a vinegar of choice, rice wine vinegar or apple cider vinegar)
- 1 teaspoon salt
- 1/2 teaspoon paprika
- 1 teaspoon ground cumin
- chopped chives or fresh parsley for garnish (optional)

Directions:
Peel carrots and chop into even size segments (approximately 1-2 inch pieces). Drop the carrots pieces in a pot and cover with just enough water to cover the pieces plus one inch. Boil the carrots until tender - about 10 minutes (the prongs of a fork should easily go through the carrots but the carrots should still otherwise hold some form, think al dente). If you are mashing by hand, boil until slightly more soft - an additional 5 minutes.
Meanwhile smash the garlic cloves and put in the blender/ food processor. Peel and slice the fresh ginger and also place in the blender. Blend/process for 10 seconds until both are minced up. If making by hand mince the garlic and fresh ginger first. Then add the oil, vinegar, salt, paprika, and cumin and process for 30 seconds, or whisk together by hand in a large bowl until all items are incorporated.

Drain the carrots and add to the food processor/ blender or bowl. Blend until you have a smooth, dippy consistency, approximately 2 minutes. If using a blender be sure to scrape down the sides of the blender periodically so all the carrot bits get evenly blended. If mashing by hand, use a wooden spoon, muddler or potato masher, mash vigorously until the mixture is as smooth as possible. The texture may be a bit different and a couple larger bits of carrots may remain, but it will still taste delicious!

Chill for at least 30 minutes in the fridge before serving. If you like garnish the dip with chopped chives or parsley, or if you prefer a bit of crunch top with everything spice or a dukkah of your choice. Serve alongside your preferred vehicle (pita bread or chips, bread of any sort, pretzels, etc) Make it a meal by slathering it thick on bread and topping it with your favorite protein or some sautéed veggies.

Common Core Connections:

Grades 1-4
Math - Operations and Algebraic Thinking
What does this mean?
Within the Common Core in first through fourth grade, Operations and Algebraic Thinking covers the basic operations of addition, subtraction, multiplication, and division. Common Core Mathematics asks students to think more critically about mathematical operations - for example, students are asked not only what is 4 times 3, but also asked to explain why 4 times 3 is 12.

What does this look like?
Below you will find math problems and scenarios by grade level that students can work through. Depending on the current skill level of your child, you may want to adjust to a lower level if it is too challenging, or a higher level to create additional challenges. You can also have your child start with the first grade activity and work up towards grade four. For additional practice, you can change the numbers in each problem and have your child work the new problem using different numbers.

Materials needed:
- Pencil
- Paper
- Counters or hundreds chart (i.e. beans, pennies, buttons) if needed
Directions:
Imagine that you and your family get together to make Carrot Hummus Dip for a family party. Answer the following questions. Be sure to show your work!

Grade 1:
1.OA.A: Represent and solve problems involving addition and subtraction.
1.OA.B: Understand and apply properties of operations and the relationships between addition and subtraction.

Using counters or a hundreds chart, paper, and pencil, solve the following problem:

Each family member passes you a few carrots to put in the water to boil. Mom gives you 3 carrots, Auntie gives you 2 carrots, and your sister gives you 4 carrots.

1. How many carrots did your Mom and sister give you in all? Show how you figured it out.
   ______ carrots

2. How many carrots did your Mom, Auntie, and sister give you in all? Show how you figured it out.
   ______ carrots

3. If you have 12 carrots all together that are purple and orange carrots, and 4 of them are orange, how many are purple? Show how you figured it out.
   ______ purple carrots

Grade 2:
2.OA.A: Represent and solve problems involving addition and subtraction.
2.OA.B: Add and subtract within 20.

1. The grocery store where you buy ingredients for the carrot dip is 10 miles from your house. If you have traveled 3 miles so far. How many more miles do you have to go to reach the store? Show how you know your answer is correct.
   ______ miles

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2. At the grocery store, you spend $20. On your way home, you stop and buy some bread from the bakery to serve with the hummus which is $4. How much money did you spend all together for groceries and bread? Show how you know your answer is correct.

$_____

3. You used 12 carrots for the dip. There were 20 carrots in the pack you bought. How many carrots did you not use?

______ carrots

Grade 3:
3.OA.A: Represent and solve problems involving multiplication and division.
3.OA.B: Understand properties of multiplication and the relationship between multiplication and division.
3.OA.C: Multiply and divide within 100.
3.OA.D: Solve problems involving the four operations, and identify and explain patterns in arithmetic.

You are setting up chairs for people to watch a movie at the party after you eat. You can set up 12-16 chairs in different types of arrays. In each box below, there is a description of an array.

1. Draw an array in each of the boxes that matches the description.
2. Then, write a multiplication equation that matches the array that you drew.
3. Finally, write a division equation that matches the array.

<table>
<thead>
<tr>
<th>4 by 2</th>
<th>12 by 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 by 3</td>
<td>2 by 6</td>
</tr>
</tbody>
</table>
Grade 4:
4.OA.A: Use the four operations with whole numbers to solve problems.

Tortillas for Everyone:
1. You decide you will make a few extra batches of carrot dip to share with the neighborhood. You will have three choices of what to eat the carrot dip with: pretzels, pita bread, or celery.

<table>
<thead>
<tr>
<th>Item for Serving with Dip</th>
<th>Amount in One Family-Size Serving</th>
<th>Amount in 6 Family-Size Servings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretzels</td>
<td>30 pieces</td>
<td>pieces</td>
</tr>
<tr>
<td>Pita Bread Pieces</td>
<td>24 pieces</td>
<td>pieces</td>
</tr>
<tr>
<td>Celery Sticks</td>
<td>16 pieces</td>
<td>pieces</td>
</tr>
</tbody>
</table>

You will make 6 family-size servings of each to feed all of your neighbors. How many pieces of each will you need to prepare? Fill in the table.

2. You make 6 family-size servings of each (pretzels, pita bread, celery) including carrot hummus dip, and if you give one to each family and you have none leftover, how many families did you give carrot hummus to? Show how you got your answer by writing an equation or drawing a picture.

Family Discussion Questions:

Families/children could discuss or write about:

- Do you prefer carrots cooked or raw? What about other vegetables?
- What types of things do you like to eat with dip? What is your favorite type of dip?
- What types of recipes or food can you think of that is both healthy and really tasty?
Extension Activities:

Here are some suggestions for additional activities that relate to this recipe:

1. Based off of the ingredients in this dip, research the nutritional benefits of the ingredients used.
2. Read *The Sandwich Swap* by Kelly DiPucchio and Queen Rania of Jordan. Write about your favorite sandwich.

*This Family Lesson was written by Pilot Light Food Education Fellow, Chandra Garcia-Kitch, and Pilot Light Staff.*