

**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 Lesson**  
**Polenta with Mushrooms and Greens**  
**+ Grades K-8 Common Core Math Skills**

**Suggested Recipe Age Range: 6 and up with adult help**

**Recipe by Chef Julia Weeman**

**Polenta with Mushrooms and Greens**

Serves 4

**Ingredients:****Polenta**

3 cups water, chicken stock, or other broth

1 tsp. salt

1 cup coarse corn grits/polenta

3 Tbsp butter or extra virgin olive oil (or combination)

**Optional:**

2 Tbsp cream

1 bay leaf

3 sprigs thyme leaves, picked (other soft herbs such as basil or parsley would also work well)

**Mushrooms**

1.5 lbs mushrooms, cut or broken into bite-sized pieces

Chef's choice combination of alliums

-1 Tbsp minced garlic, shallot or onion

or

-1/4 cup diced spring alliums (scallions, spring onions, ramps, green garlic, scapes)

2-3 Tbsp extra virgin olive oil (or other neutral oil)

Salt (to taste)

**Greens**

1 large bunch swiss chard, spinach, lacinato kale, or other tender green, stems removed and chopped into 1 inch pieces, leaves torn into large pieces

1 Tbsp extra virgin olive oil

Salt (to taste)

**Directions:**

1. Bring water and salt to boil. Add bay leaf, butter or olive oil and cream, if desired, then grits/polenta, stirring to incorporate. Lower heat to medium low and cook 30-45 minutes, stirring occasionally, until soft and creamy, adding more water or stock if needed. Add thyme and adjust salt to taste.
2. While polenta is cooking, heat a heavy sauté pan over high heat. Add oil, then mushrooms. Season well with salt. Once water from mushrooms has mostly evaporated and mushrooms begin to brown, lower heat to medium and toss to encourage even browning, letting them continue to cook and get color on all sides until they are crispy and cooked through. Add in your choice of allium, stirring until cooked and fragrant.
3. Don't forget to stir your polenta every 5 minutes or so while you're cooking your mushrooms and chard!
4. In a medium pot or deep pan, heat oil over medium. Add stems and cook until just tender. Add a splash of water, then greens, and cover. Reduce heat to low and cook 3-5 minutes or until leaves and stems are tender. Adjust salt to taste and add butter if desired.
5. Spoon polenta into a bowl or serving dish and spoon the vegetables on top.

**Common Core Connections:**

**Grades K-2nd**

**Mathematics - Counting and Cardinality & Operational and Algebraic Thinking**

Common Core Standards: K.CC.2K & 1.OA.1, 2.OA.2

Students can count numbers, and add and subtract within 20.

**What does this mean?**

Students in kindergarten are learning to count and use numbers to add and subtract. As students progress they are able to add and subtract numbers including and up to 20.

**What does this look like?**

Students will have opportunities to count the items as they are added to the creation of the

polenta dish and subtract the number of items not needed from a total.

Materials needed:

- Vegetables (such as greens, mushrooms, etc)
- Knife
- Cutting board
- Any other dried materials can be used instead of the items needed for the recipe

Directions:

1. Wash hands prior to using the food pieces.
2. Cut or tear greens and mushrooms into pieces if you'd like.
3. Count the number of pieces of each ingredient (or at least a portion of the pieces if working with a large number).
4. Add the number of each ingredient together.
5. Subtract a number from the total.
6. Continue subtracting items until all are subtracted.
7. Write at least one math equation that represents how you added or subtracted in the activity (for example,  $12 \text{ mushrooms} - 4 \text{ mushrooms} = 8 \text{ mushrooms}$ ).

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### Grades 3rd-5th

#### Mathematics - Operations and Algebraic Thinking & Numbers and Operations in Base Ten

Common Core Standards: 3.OA.1, 4.OA.4, 5.NBT.1

Students can multiply and divide numbers within 100 and understand place value and carry out multi step problems using multiplication and division.

#### What does it mean?

Students will be able to multiply and divide numbers including and up to 100 and then progress to higher numbers that include multi digit whole numbers and decimals.

#### What does it look like?

Students will add, subtract, multiple, and divide items in the recipe

Materials needed:

- Vegetable pieces
- Any other dried materials can be used instead of the items needed for the recipe

Directions:

1. Wash hands prior to using the food pieces.
2. Cut greens, mushrooms, and any other vegetables into pieces if needed.
3. Count all pieces of the ingredients to get a total.
4. Subtract an amount from the total to find the amount left and continue subtracting different amounts until all the pieces are subtracted.
5. Divide the pieces into different piles starting with two to determine how many pieces are in each pile when divided by that number. If pieces are left over discuss how it would be fair to divide those pieces up. (Into parts or decimals.)

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## **Grades 6th-8th**

### **Mathematics - Ratios and Proportional Reasoning**

Common Core Standards: 6.RP, 7.RP

Students will analyze proportional relationships and use them to solve real-world mathematical problems.

#### **What does this mean?**

Between 6th and 8th grade students progressively learn about the relationships between numbers. If one number increases or decreases, how does it change another number in a identified pattern that stays the same. Students progressively deepen understanding by applying the relationship of change to a specific situation. Ultimately, students will be able to apply the concept and construct an algebraic equation that defines the proportional change.

In this lesson, you (the student) will be working on determining the relationship between proportions in a real life situation as it is applied to adjusting the recipe dependent upon the need to increase or decrease the amount.

#### **What does this look like?**

Students will imagine they are cooking the polenta dish for a get-together with five of their friends and for their family consisting of three people. The recipe listed feeds four so the student will have to use proportions to determine how to adjust the recipe to feed 8 individuals. 6th and 7th grade students can calculate and state the relationship and 8th grade students can write a mathematical equation for the relationship.

#### **Materials needed:**

- Pen or pencil
- 8"x11" lined piece of paper folded lengthwise into four columns (Folded "hot dog" style)
- Calculator if needed

#### **Directions:**

1. Title the columns at the top in the following order: Ingredients, Original Amount of Ingredients for 4 People, Adjusted Amounts for 8 People, and Other.
2. List the ingredients in the first column.
3. List the amount of each ingredient in the second column for 4 people.
4. Multiply each amount by two to double the amount of the ingredients needed to feed double the amount of people, which is 8 people, and write the adjusted amount in the third column
5. Try adjusting the recipe for just you and one of your friends, for a larger amount of people, or for an odd number of people to fill in the Other column.
6. 6th and 7th graders can state and write a statement of the relationship between the amounts when the recipe is increased or decreased.
7. 8th graders can write a formula that represents the relationship.



### **Family Activities and Discussion Questions:**

#### **Families/children could discuss or write about:**

- What type of grain do you prefer? For example, polenta, rice, oatmeal, quinoa.
- What are some other veggies or ingredients that would be yummy to combine with polenta.

### **Extension Activities:**

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

- Find out more about how polenta and corn grits are made. How is polenta different than grits? Research the history of grits and which groups of people have eaten grits throughout the history of North America.
- Learn more about the different varieties of corn that are grown. Create a chart comparing the different types and how they are used or eaten.
- Try serving sauteed vegetables of your choice over other types of grains such as rice and quinoa. Research the nutrition of each type of grain and choose your favorite combination.

*This Family Lesson was written by Pilot Light Staff.*