|  |  |
| --- | --- |
| Title | My Plate |
| Overview | Students will become familiar with the USDA My Plate icon and the recommendations for planning a healthy meal. Students will plan meals and then analyze the meals to determine what foods are dependent on pollinators. Students will draw conclusions on how declining pollinators can affect food availability limiting nutritional food options. |
| Standards | **Wellness**WE.3.4.01 Describe the food guide pyramid and its value to personal health, recognizing that food provides energy and nutrients for growth and development.WE.3.4.02 Record and compare food choices based on recommended serving sizes.WE.3.4.09 Assess factors (e.g. food choices, physical activity, genetic) that contribute to achieving and maintaining a healthy body.**English Language Arts**ELA.3R.C1.5 Determine the main idea of an informational text; recount the details and explain how they support the main idea.ELA.3.R.C2.4 Determine the meaning of general academic and domain-specific words and phrases in an informational text relevant to a grade 3 topic or subject area.ELA.3.R.C3.3 Use information gained from illustrations (e.g., maps and photographs) and words in an informational text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).ELA.3.SL.C13.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, teacher-led) with diverse partners on grade 3 topics and texts, building on others’ ideas and expressing their own clearly.ELA.3.SL.C13.2 Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively and orally.ELA.3.W.C9.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly**21st Century Learning**21C.S.3-4.2 The student will demonstrate the ability to explore and develop new ideas, to intentionally apply sound reasoning processes and to frame, analyze and solve complex problems using appropriate technology tools.**Science and Engineering Practices**• Asking questions and defining problems. |
| Materials/Advance Preparation Needed | **Materials:*** Science notebook
* Paper plates
* Construction paper: brown, green, red, purple, and blue – for food groups
* Large white paper – for placemat
* Glue

**Advance Preparation:**Review USDA Choose My Plate website. This lesson is designed to allow student 1:1 computer/internet access to explore USDA Choose My Plate website.**Resources:*** USDA Choose My Plate: <http://www.choosemyplate.gov/>
* List of crop plants pollinated by bees: <http://en.wikipedia.org/wiki/List_of_plants_pollinated_by_bees>
* Pollinator movement and crops in the U.S.: <http://www.ers.usda.gov/data-products/chart-gallery/detail.aspx?chartId=49126&ref=collection>
 |
| Procedures/Steps:(Emphasis on students making inquiry, e.g., posing questions/problems and working towards answers and solutions)  | **Part 1:**1. Explain to students that we are going to explore the USDA My Plate website and gather information on making healthy choices when it comes to eating and meal planning.
2. Have students go to [www.choosemyplate.gov](http://www.choosemyplate.gov)
3. Click on “MyPlate” tab in upper left corner.
4. Students will take notes on each of the five food groups:

FruitsVegetablesGrainsProtein FoodsDairyThings to include in notes:Examples of foods included in this group?How much of this group do I need to eat in one day?What makes a serving?What are the benefits of eating foods in this group?1. After students complete research, they will create a MyPlate icon using construction a paper plate and construction paper. Construction paper: brown, green, red, purple, and blue – for food groups and large white paper – for placemat. Use icon on website as model. Label each food group. Glue plate and dairy to large white paper (placemat).

Part 2:1. Ask student to create a meal plan for one day following MyPlate recommendations.
2. Have students make a list of foods from their meal plan that come from crops or have ingredients that come from crops that are pollinated by pollinators.
3. Provide students with lists of crops that are pollinated by pollinators because some foods are not obvious.
4. Have students answer the following questions in their science notebook:

How would the disappearance of pollinators affect the type of foods we eat?How would farmers be affected by the disappearance of pollinators? |
| Assessment (What will be the evidence of student learning?) | Students will be assessed on their answer to the following questions:How would the disappearance of pollinators affect the type of foods we eat?How would farmer be affected by the disappearance of pollinators? |