

This is a resource for teaching math using Agriculture in the Classroom lessons. The domains and clusters for the New York State Next Generation Mathematics Learning Standards are listed for each grade level up until algebra I to highlight how the lessons can be included in planning. Standards aren't listed to avoid being too prescriptive, educators are encouraged to choose the specific standards that match their overall planning. Some of these lessons have direct connections while some may require modifying problems to make connections even stronger. In addition to these lessons, there are additional lessons found on the [Agricultural Literacy Curriculum Matrix](#).

<i>Grade</i>	<i>Lessons from the curriculum matrix</i>	<i>Next Generation Mathematics and Common Core domains and clusters</i>
Pre-K	<a href="#">All Kinds of Farms</a> <a href="#">Animals on the Farm</a> <a href="#">Crops on the Farm</a> <a href="#">Machines on the Farm</a>	Counting and cardinality – Count to tell the number of objects.
K	<a href="#">Counting Sheep or People? Census 2020</a> <a href="#">Agriculture Counts</a> <a href="#">Tomato Trivia</a>	Number and Operations in Base Ten – Work with numbers 11- 19 to gain foundations for place value.
1	<a href="#">Freshest Fruits</a> <a href="#">Milk or Meat? Beef or Dairy?</a>	Operations and Algebraic Thinking – Understand and apply properties of operations and the relationship between addition and subtraction
2	<a href="#">Dig Em Up</a> <a href="#">From Sap to Syrup</a> <a href="#">Farming in a Glove</a>	Measurement and Data – Measure and estimate lengths in standard units.
3	<a href="#">A Day Without Dairy</a> <hr/> <a href="#">A Rafter of Turkeys</a>	Operations and Algebraic Thinking – Represent and solve problems involving multiplication and division. <hr/> Geometry – Reason with shapes and their attributes.
4	<a href="#">FoodMASTER: Measurement</a> <hr/> <a href="#">Customary &amp; Metric Food Measurement</a>	Number and Operations – Fractions – Extend understanding of fraction equivalence and ordering. <hr/> Measurement and Data – Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.
5	<a href="#">Edible Numbers</a>	Geometry –

	<a href="#">Let's Raise a Barn</a>	Graph points on the coordinate plane to solve real-world and mathematical problems.  Measurement and Data –  Geometric measurement: understand concepts of volume and relate volume to multiplication and addition.
6	<a href="#">FoodMASTER Middle: Cheese</a>  <a href="#">Fertilizers and the Environment</a>	Ratio and Proportional Reasoning –  Understand ratio concepts and use ratio reasoning to solve problems.  Statistics and Probability –  Develop an understanding of statistical variability.
7	<a href="#">Grocery Store Problem Solving</a>  <a href="#">What's on MyPlate?</a>	Ratio and Proportional Reasoning –  Analyze proportional relationships and use them to solve real-world and mathematical problems.  Statistics and Probability –  Draw informal comparative inferences about two populations.
8	<a href="#">The Right Solution</a>	Expressions and Equations (Inequalities) –  Work with radicals and integer exponents.
Algebra I	<a href="#">Understanding Bacteria</a>  <a href="#">One in a Million</a>  <a href="#">Concentrate on the Solution</a>	Seeing Structure in Expressions –  Interpret the structure of expressions.  Number and Quantity –  Reason quantitatively and use units to solve problems.