Lesson 1: Expressing Ideas
Students will take a pretest and share their initial ideas on the Expressing Ideas Tool about animal growth, identifying what animals need to grow and gain mass.

Lesson 2: Foundations: Materials in Our Food
Students will "zoom into" food and examine nutrition labels to learn about the materials in plants, animals, and our food including organic materials (fats, carbohydrates, and proteins).

Lesson 3: Investigating Mealworms Eating
Students conduct an investigation to explore what happens when mealworms eat, move, breathe, and grow. They use the Predictions Tool and the Evidence-Based Arguments Tool.

Lesson 4: Explaining How Animals Move and Function
Students model the oxidation of glucose to carbon dioxide and water using molecular model kits and use the Explanations Tool to explain what happens when cows move and function.

Lesson 5: Explaining How Animals Grow
Students trace the processes involved in a cow growing, digesting, and biosynthesis on a poster. Construct a model of the breakdown and rebuilding of molecules through digestion and biosynthesis and use Explanations Tools to explain digestion and biosynthesis.

Lesson 6: Other Examples of Digestion, Biosynthesis, and Cellular Respiration
Students practice explaining digestion, biosynthesis, and cellular respiration in other animals and then take the unit posttest.