



APPRENTICE CHEF

For Culinary Explorers Ages 10 to 14

What mysteries are hidden in the food we eat? Top off your lab coat with a chef's hat, because you're about to conduct some experiments that show the connection between science and what's on our plates.

Each experiment comes with a recipe for a tasty, nutritious dish that you can enjoy with your family and friends. The secrets of cooking are yours to discover, apprentice chef!



Activities

The Ferment Wars

Making yogurt – Lactic fermentation experiment
 Recipe: Breakfast smoothie

Bread Science

Baker's yeast or baking soda? – Leavening agents experiment
 Recipe: Banana bread
 Making a gluten ball – Wheat flour experiment
 Recipe: Pizza crust

Mighty Proteins

How egg-citing! – Eggsperiments
 Experiment 1: Is your egg fresh?
 Experiment 2: Hardboiled or uncooked egg?
 Experiment 3: Bare-naked egg
 Experiment 4: Shrinking egg
 Recipe: Hard-boiled egg sandwich filling
 Recipe: Mini-frittatas with ham and cheese
 Guts and gas – A Gassy experiment
 Surprising pantry – Germination experiment
 Preparing dried beans
 Recipe: Mexican black-bean dip

From Scraps to Decorative Plants

At the heart of a fruit – Propagating plants from seeds
 The citrus seed secret – Germination experiment
 Recipe: Lemon ice cubes and frozen pops
 Cold wake-up call – Germination experiment
 Recipe: Cool peach salsa
 Cloning – Vegetative propagation
 Crowned with roots – Vegetative propagation experiment
 Recipe: Pineapple and fresh berry salad
 From potato to plant – Vegetative propagation experiment
 Recipe: Tasty oven-fries