

**Jefferson County Educational Service Center
Virtual Learning Academy
Required Course Materials
SCI 160: Science 160**

Unit 01: Scientific Inquiry, Exploration and Analysis

2 plants, fertilizer, soil for plant

Unit 02: Observations vs. Inferences

2 clear 1 cup containers, 2 tablespoons baking soda, 2 tablespoons vinegar

Unit 03: Safe Science Procedures

Protective wear: goggles, gloves

Unit 04: Setting Up an Experiment or Investigation

One individual bag of M&M's, science notebook

Unit 05: Observation Tools

A hole punch, tape, 4 blank note cards, salt, sugar, paper, soil

Unit 06: Measurement Tools

Thermometer, calculator, balance, beaker, water, toy car (that can go in water),
At home: cracker box, cereal box, or a shoe box, rock, sugar cubes

Unit 07: Basic Concepts of Matter

4 ice cubes, shallow bowl, candle

Unit 08: Periodic Table

Large sugar cookie, icing, Choose from: chocolate chips, M&M's, skittles,
marshmallows, peanut butter chips, chocolate chips, popcorn, raisins, jelly beans
eyedropper or syringe, few drops of perfume, deflated balloon, jar

Unit 09: Properties of Solids, Liquids, and Gases

4 ice cubes, shallow bowl, candle

Unit 11: Everyday Perspectives

3 cups, 3 pennies, Vinegar, dishwashing liquid
¼ cup vinegar, 2 tbsp baking soda, 2 balloons, 2 empty water bottles

Unit 14: Research Men and Women of Science

Sink or large foil pan with water, vegetable cooking oil, dishwashing liquid, sponge, paper towel, drinking straws

Unit 15: Renewable Energy Sources: Wind, Solar and Geothermal

4 graham crackers, 2 plain milk chocolate candy bars, 8-by-11-inch glass baking pan, a clear glass lid for the baking pan, 1 thermometer

Unit 19: The Rock Cycle

Clean empty coffee can with plastic lid, 2 inch samples of granite, sandstone chalk, basalt or rocks from your yard, clear 7oz plastic cup of water, watch or timer, metric ruler

Unit 21: Basic Functions of Cells

One raw egg, apple cider vinegar (any vinegar will work), yogurt container with a lid plastic sacks, twist ties, jello, gelatin, boiling water, large mixing bowls, spoons plastic "tupperware" sandwich containers, canned fruits, paper and writing implement

Unit 25: Cell Differentiation

Crayons, 2 quarters, 2 nickels, 2 dimes, 2 pennies
2 flower pots, soil, potato (with "eyes") for planting

Unit 26: Interaction among Organisms; Symbiosis

Meter sticks, metric rulers, poster board, markers, photographs of ecosystems

Unit 29: Robots and Machines

Drawing supplies, building construction sets or household junk, boxes, rods, tongue depressors, pipe cleaners, etc.

Unit 31: Designs Using Technology and Problem Solving

Toothpicks and mini marshmallows