WAMC Lab Template

Math Concept(s): Measurement and proportions

Source / Text: CORD Unit 3

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Attach the following documents:

Lab: Add at least four ingredients to a container to make trail mix.
Peanuts, raisins, M&Ms, banana chips, coconut, cashews, chocolate chips, granola
Measure each ingredient carefully, using a measuring cup or measuring spoon, and record the ingredients and the measurements. Calculate the proportions for the completed trail mix container. How percent ingredients in trail mix

Student Handout(s) Ingredient and measuring chart (Attached) Labels or printouts

Rubric and/or Assessment Tool Reflection paragraph: (Attached)

Indicate "*SPECIFIC*" relationship to Science, Technology, or Engineering

Short Description (Be sure to include where in your instruction this lab takes place):

After the snacks and beverages calorie lesson (sugar and fat boards)

Lab Plan

Lab Title: Trail Mix: How Much of What is in There?

Prerequisite skills: liquid and dry measuring cups, reading and understanding food labels

Lab objective: Student will be able to calculate the proportion of the ingredients are in mixed foods.

Standards:

Mathematics K–12 Learning Standards:

- A1.1A, A1.1B, A1.2A, A1.2B

Standards for Mathematical Practice:

- Make sense of problems and persevere in solving them
- Use appropriate tools strategically

CCSS-ELA (Reading, Writing, Speaking & Listening):

- Written evaluation of observations

Leadership/21st Century Skills:

21st Century Interdisciplinary themes (Check those that apply to the above activity.)

☐ Global Awareness ☐ Financial/Economic/Business/Entrepreneurial Literacy ☐ Civic Literacy
☒ Health/Safety Literacy ☐ Environmental Literacy

21st Century Skills (Check those that students will demonstrate in the above activity.)

LEARNING AND INNOVATION

Creativity and Innovation
- ☐ Think Creatively
- ☐ Work Creatively with Others
- ☐ Implement Innovations

Critical Thinking and Problem Solving
- ☐ Reason Effectively
- ☐ Use Systems Thinking
- ☐ Make Judgments and Decisions
- ☒ Solve Problems

Communication and Collaboration
- ☐ Communicate Clearly
- ☐ Collaborate with Others

INFORMATION, MEDIA & TECHNOLOGY SKILLS

Information Literacy
- ☐ Access and Evaluate Information
- ☐ Use and manage Information

Media Literacy
- ☐ Analyze Media
- ☐ Create Media Products

Information, Communications and Technology (ICT Literacy)
- ☐ Apply Technology Effectively

LIFE & CAREER SKILLS

Flexibility and Adaptability
- ☐ Adapt to Change
- ☐ Be Flexible

Initiative and Self-Direction
- ☐ Manage Goals and Time
- ☐ Work Independently
- ☐ Be Self-Directed Learners

Social and Cross-Cultural
- ☒ Interact Effectively with Others
- ☐ Work Effectively in Diverse Teams

Productivity and Accountability
- ☐ Manage Projects
- ☐ Produce Results

Leadership and Responsibility
- ☐ Guide and Lead Others
- ☒ Be Responsible to Others

Teacher Preparation: (What materials and set-up are required for this lab?)

Materials

- Peanuts, raisins, M&Ms, banana chips, coconut, cashews, chocolate chips, granola
- dry measuring cup and spoon

Set-Up Required:

- Create a bin of supplies for each class

Lab Organization Strategies:

Leadership (Connect to 21st Century Skills selected):

- Students help with set up and clean up. Each student in the group will have a job

Cooperative Learning:

- Work in groups of 3 or 4

Expectations:

Students will be able to explain about the proportion of ingredients

Timeline:

- 55 minutes

Post Lab Follow-Up/conclusions:

Discuss real world application of learning from lab

- Make informed decisions about snack foods

Career Applications

- Retail, food service, dietician

Optional or Extension Activities

- Create yogurt parfaits