Lab Framework

Text: Cord/ AMME

Unit number and title: Unit 1 Learning problem solving technique

Unit 2 Estimating Answers

Unit 5 Dealing with Data/Unit 3 Label Method

Integrated in all units.

Short Description: Students will calculate fruit maturity dates of different varieties of apples.

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Date: 6-25-10

<u>Lab Title</u> <u>Harvest Time</u>

LAB PLAN

TEACHER: Teacher Prep/Lesson Plan

Lab Objective

Calculate the amount of days until maturity of the apples without the use of a calculator and or calendar.

Statement of pre-requisite skills needed

The number of days for maturity Golden delouses (143 days), Red delouses (147 days) and Fuji (160 days) takes to mature.

Vocabulary

Bloom date, Fruit maturity, Golden Delicious, Red Delicious, Fuji.

• Materials List

Hand, pencil and paper

State Standards addressed

Math: A1.1.A, A1.8.A, A1.8.B, A1.8.C

• Leadership Skills

Team work, participate state apple CTE. DECA, FFA, FBLA, FCCLA, SkillUSA

• SCAN Skills/Workplace Skills

Problem solver ability to communicate, ability to work will with other people. DECA, FFA, FBLA, FCCLA, SkillUSA

Set-up information

Know varieties of apples and the months in a year.

- **Lab organization:** Students can work in groups of 2 or individually one class period of 55 min.
- Teacher Assessment of student learning accurately of conversions, worksheet completion, formative evaluation.

• Summary of learning

Discuss real the world effects of inaccurate and incomplete data, students will present there findings, discuss how they found their findings.

Optional activities

Finding the maturity dates of additional varieties of fruits.

Career Applications

Fruit inspector, Farmer, Chemical field man.

LAB TITLE: <u>Harvest Time</u> STUDENT INSTRUCTIONS:

Statement of problem addressed by lab

Students will calculate the actual date on which the 3 different varieties of apples will reach full maturity.

Grouping instructions and roles

The students will work in groups of 2 or individually. The student will calculate the actual date the varieties of apples will reach full maturity.

- **Procedures** steps to follow/instructions
 - 1. The students will determine the number days in a month using the "knuckle method".
 - 2. If the full bloom date is (assume) April 12th for all fruit, based on the full maturity date for each variety of fruit, determine the harvest date.
 - 3. The students will then determine the actual date of maturity.

• Assessment instructions (peer-teacher)

Students analyze the data to calculate the actual maturity date of the given variety of apples.

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Lab Data Collection

Unit: Cord Unit 1, Unit 2, Unit 5 AMME Unit 3	
Lab Title: Harvist Time?	

Date:

Criteria: You are calculating the full maturity date for 3 varieties of apples from a given bloom date.

Data Collection: The actual full bloom date of given variety of apple.

Calculations: Calculate the full maturity date from given full bloom date.

Summary Statement:

Student:

Students find the date of full maturity for varieties of apples.

Other Assessment(s)

Based on this lab the maturity dates varieties of apples.

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