

Lab Framework

Text: Cord Applied Mathematics

Unit number and title: Unit 2-Estimating Answers

Short Description: Students will use jellybeans (or some other candies, etc) to teach and/or reinforce such math skills as addition, place value, graphing, and estimation.

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Lab Title

Estimating with Jellybeans

LAB PLAN

TEACHER: Teacher Prep/ Lesson Plan

The students will be able to use their skills to use the jellybean math activities that teach estimation, place value, graphing, and rounding.

- **Statement of pre-requisite skills needed** (i.e., vocabulary, place value knowledge, estimation techniques, etc.)
- **Vocabulary**
Approximation, Estimation, Rounding, Units place
- **Materials List**
Jellybeans, closable baggies, paper and pencils, small paper cups, worksheet
- **State Standards addressed**
Math: A1.2.D Determine whether approximations or exact values of real numbers are appropriate, depending on the context, and justify the selection.
A1.6.B Make valid inferences and draw conclusions based on data.
A1.8. Core Processes: Reasoning, problem solving, and communication
Reading: (Reading)
Writing: (Writing)
- **Leadership Skills**
 - 2.1 – Communicate, participate and advocate effectively in pairs, small groups, teams, and large groups in order to reach common goals.
- **SCAN Skills/Workplace Skills**
 - *Arithmetic/mathematics* - performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques
 - *Writing* - communicates thoughts, ideas, information, and messages in writing; and creates documents such as graphs
 - *Reading* - locates, understands, and interprets written in documents such as graphs
- **Set-up information**

Divide students into groups of 2
One student retrieves the required materials
One student is the recorder
Presentation Station is ready to use
Worksheet is ready to handout

- **Lab organization**(-Grouping/leadership opportunities/cooperative learning expectations; -**Timeline required**)
 - Assign group roles
 - Task completed in one class period
- **Teacher Assessment of student learning** (scoring guide, rubric)
 - Visual observation
 - Collection of worksheet
- **Summary of learning** (to be finished after student completes lab)
 - discuss real world application of learning from lab
 - opportunity for students to share/present learning
 - Class to discuss lab and what difficulties they ran into while completing the worksheet
- **Optional activities**
 - When come to Unit 4 students will create a graph of their choosing in order to share their results

To use when there is a need for gathering information
To work within a team

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LAB TITLE: Estimating with Jellybeans

STUDENT INSTRUCTIONS:

- **Statement of problem addressed by lab**

In this activity you will:

Estimate the number of jellybeans in your bag and then your partner's bag

Count the exact number in both bags

Divide jellybeans by colors and place tally marks on worksheet

Determine how far off from the actual number of jellybeans was your estimate?

- **Grouping instructions and roles**

Materials manager

Recorder

- **Procedures** – steps to follow/instructions

1. Estimate the number of jellybeans

2. Count the exact number of jellybeans

3. Divide jellybeans by colors

4. Place tally marks on worksheet

5. When finished counting, numbers will be placed in the right place value per category and then the final count will be placed in the right columns

- **Outcome instructions**

You should have completed the worksheet and had fun. You will now get a fresh supply of jellybeans after you have thrown away those that were touched by both yourself and your partner.

- **Assessment instructions** (peer-teacher)

Your teacher will be watching during the estimating process, the counting process, filling in the worksheet, and placing the numbers into the right place values.

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Lab Data Collection

Student: _____ **Date:** _____

Unit: 2 – Estimating Answers

Lab Title: Estimating with Jellybeans

Criteria: Write the problem/objective in statement form

Data Collection: Record the collected/given data

Calculations: Complete the given calculations to solve for an answer(s)

Summary Statement:

Provide your own opinion to this lab in paragraph form.

Other Assessment(s)

Creating graphs when reach Unit 4

Red	Green	Yellow	Black	White	Purple	Orange	Brown

Put correct place value names in top box, and then place your total number under the correct place value

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