

## First Grade - Real World Experience

### Unit 4 - Understanding Place Value

Essential Question: "What comes in groups of tens?"

"If you have a certain number of objects and 10 can fit into a container, how many containers would you need?"

#### Teacher Instructions:

This Real World Experience is completed throughout the 5 week unit. You will implement these activities with corresponding Topics within the unit.

Task 1 - Complete after topic of Understanding two-digit numbers.

Task 2 - Complete after topic of Understanding two-digit numbers.

Task 3 - Complete after topic of Regrouping/grouping of tens and ones.

Task 4 - Complete after topic of Compare 2 two-digit numbers.

You will need to keep all Task work during the unit for summative assessment. Tasks 1-3 will be used for formative assessment. Task 4 will be used for summative assessment.

1. Before reading the scenario to the class, you must decide what objects will be used for the "Grab and Fill" game and what containers will be used. Set up the game so that there are not more than 99 objects and not more than 10 containers. You will also want to group your students into small groups for teams.

#### Suggested Materials for Grab and Fill Game:

- Erasers
- Math Cubes
- Dice
- Math Animal Counters
- Any small objects that are available to you

#### Suggested Materials for Containers:

- Plastic Bags
- Buckets
- Bins
- Boxes

2. Read the attached scenario to the class.
3. For Task 3: creating the class graph can be done in any format based on teacher discretion. Common core standards suggest that first grade students are only comparing up to 3 categories. Unlike previous tasks, this graph does not need to be completed as a whole group. You may have more than 3 teams within your classroom, but can join groups together to create team graphs. It is up to the teacher what type of graph their students are creating. (Bar graph/Tally chart)

Examples include:

- SMART board
- Grid Paper
- Construction Paper

#### Scenario:

You are going to Family Fun Night at your school. A game you and your friends decide to play is "Grab and Fill". The object of the game is to grab a handful of objects in a certain amount of time. At the end of the game you will have to decide how many containers are needed to transport the objects to the prize station. Each container can only hold 10 objects.

Task 1: Students will play "Grab and Fill" game (teacher will set timer for each player. Time is per teacher discretion (:10, :15....). After playing game, each student needs to record the number of objects they grabbed. (Recording Sheet is attached to BYOC). Each student needs to save their entire amount of objects in their own bag to use for task 2.

Task 2: The team uses their recording sheets (Recording Sheet is attached to BYOC) and object bag to count and group as a team. Example: Student A has 17 objects. Student B has 22 objects. They will place objects into groups of tens to regroup the objects and record the total amount. 39 is 3 groups of tens and 9 ones. They will determine how many containers are needed to transport their objects to the prize station. Remember only 10 objects can fit in 1 container. On the same recording sheet, students will record how many containers are needed for their group.

Task 3: Participate in creating graphs. Answer questions based on the results.

- How many in X category?
- How many in Y category?
- How many in Z category?
- Which category is greater than X category?
- Which category is less than Z category?

Task 4: The principal of your school wants to know how the "Grab and Fill" game went. Write a letter retelling the steps you went through to play the game, record the results, create your graph and compare data.

## Grab and Fill

Name: \_\_\_\_\_

1. Record the amount of objects you grabbed.

\_\_\_\_\_tens \_\_\_\_\_ones=\_\_\_\_\_

2. Record the amount of objects your team grabbed.

\_\_\_\_\_tens \_\_\_\_\_ones=\_\_\_\_\_

3. Record the amount of containers needed for your team.

\_\_\_\_\_

## Grab and Fill

Name: \_\_\_\_\_

4. Record the amount of objects you grabbed.

\_\_\_\_\_tens \_\_\_\_\_ones=\_\_\_\_\_

5. Record the amount of objects your team grabbed.

\_\_\_\_\_tens \_\_\_\_\_ones=\_\_\_\_\_

6. Record the amount of containers needed for your team.

\_\_\_\_\_

Name: \_\_\_\_\_ Date: \_\_\_\_\_

### Real World Experience: Scoring Guide

Essential Question: "If you have a certain number of objects and 10 can fit into a container, how many containers would you need?"

	Solution	Notes
Meeting	Divides the objects accurately and determines the correct amount of containers  uses vocabulary accurately to describe the game  includes numbers to illustrate their thinking when writing their letter to explain the game.	
Developing	Correctly completes 2 of the 3 proficient criteria.	