# Lesson 7: Round Doubloons

### Standards Alignments

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| --- | --- |
| Addressing | 5.NBT.A.3, 5.NBT.A.4 |
| Building Towards | 5.NBT.A.4 |

### Teacher-facing Learning Goals

* Examine accuracy of quantities and relate to rounding.

### Student-facing Learning Goals

* Let's explore rounding with decimals.

### Lesson Purpose

The purpose of this lesson is for students to examine situations where decimal quantities are rounded.

The purpose of this lesson is for students to consider the concept of rounding through the context of weight. There are different reasons why it can be difficult to measure quantities accurately. The quantity can be so large, like the population of Los Angeles, that counting exactly is not realistic. Or the quantity can be a decimal, like the weight of a coin, and then the issue is that introducing new place values can alter the value of the decimal. In practice, the scale used to weigh the coin measures to a specific place value and that means that the actual weight is rounded to this place value. In future lessons, students will round decimal numbers to different place values and look in greater depth at what happens in situations where reported quantities are rounded.

Throughout this lesson, students attend to precision in measurement (MP6). In some cases, such as the scale, they are given how accurately the scale measures weight. In other cases, they are given quantities and determine whether or not they are exact or approximate.

### Access for:

###  Students with Disabilities

* Engagement (Activity 2)

###  English Learners

* MLR8 (Activity 1)

### Instructional Routines

Notice and Wonder (Warm-up)

### Lesson Timeline

|  |  |
| --- | --- |
| Warm-up | 10 min |
| Activity 1 | 20 min |
| Activity 2 | 15 min |
| Lesson Synthesis | 10 min |
| Cool-down | 5 min |

### Teacher Reflection Question

What strategy did you anticipate today? Which did you not anticipate?

## Cool-down

(to be completed at the end of the lesson) 5min

A Golden Dollar

### Standards Alignments

|  |  |
| --- | --- |
| Addressing | 5.NBT.A.4 |

### Student-facing Task Statement

A one-dollar gold coin weighs 1.672 grams.

1. A scale reads to the nearest tenth of a gram. What will the scale give for the weight of this coin?
2. A different scale reads to the nearest hundredth of a gram. What will the scale give for the weight of this coin?

### Student Responses

1. 1.7 grams
2. 1.67 grams