# Lesson 17: Apliquemos el redondeo

### Standards Alignments

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

### Teacher-facing Learning Goals

* Describe how rounding can help or hinder problem-solving.
* Round multi-digit whole numbers within 1,000,000 to solve problems.

### Student-facing Learning Goals

* Redondeemos números grandes para entender situaciones y resolver problemas.

### Lesson Purpose

The purpose of this lesson is for students to use rounding to learn about situations and solve problems involving multi-digit whole numbers within 1 million.

Previously, students extended their knowledge of rounding to the nearest 1,000, 10,000, and 100,000. They began to generalize strategies for rounding any number within 1,000,000 to any place. In this lesson, students practice rounding such numbers and interpret the rounded numbers in context in order to solve problems. In doing so, they practice reasoning quantitatively and abstractly (MP2). Students also learn the benefits and limitations of rounding numbers when solving problems.

This lesson has a Student Section Summary.

### Access for:

###  Students with Disabilities

* Engagement (Activity 2)

###  English Learners

* MLR7 (Activity 2)

### Instructional Routines

Notice and Wonder (Warm-up)

### Lesson Timeline

|  |  |
| --- | --- |
| Warm-up | 10 min |
| Activity 1 | 20 min |
| Activity 2 | 15 min |
| Activity 3 | 15 min |
| Lesson Synthesis | 10 min |
| Cool-down | 5 min |

### Teacher Reflection Question

What surprised you about students’ thinking in today’s activities? What reasoning strategies did you anticipate? What did you not anticipate?

## Cool-down

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

Distanciamiento espacial

### Standards Alignments

|  |  |
| --- | --- |
| Addressing | 4.NBT.A.3 |

### Student-facing Task Statement

Dos aviones están demasiado cerca si sus altitudes están a menos de 1,000 pies cuando vuelan sobre la misma región.

* Jada dice que los aviones C y E están demasiado cerca.
* Noah dice que los aviones C y E están a una distancia segura.

Redondea para explicar por qué ambas afirmaciones podrían ser correctas.

| avión | altitud (pies) |
| --- | --- |
| A | 40,990 |
| B | 39,524 |
| C | 36,138 |
| D | 40,201 |
| E | 35,472 |
| F | 30,956 |

### Student Responses

Sample response: Jada might have thought about the actual distance between the two planes, which is only about 700 feet apart, or might have rounded to the nearest hundred (C would round to 36,100 and E to 35,500). If Noah rounded to the nearest thousand, plane C would round to 36,000 and E would round to 35,000, which is 1,000 feet apart.