# Lesson 1: Place Value Patterns

### Standards Alignments

|  |  |
| --- | --- |
| Addressing | 5.NBT.A, 5.NBT.A.1 |

### Teacher-facing Learning Goals

* Observe place value patterns when multiplying and dividing.

### Student-facing Learning Goals

* Let's observe place value patterns.

### Lesson Purpose

The purpose of this lesson is for students to observe place value patterns when multiplying and dividing.

In previous grades, students recognized that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. In the previous unit, students saw that this same pattern continues to the right of the decimal. In this lesson, students apply what they know about multiplication, division, and place value to express that each digit in a decimal represents ten times as much as it represents in the place to its right and one tenth as much as it represents in the place to its left (MP7).

### Access for:

### Students with Disabilities

* Representation (Activity 2)

### Instructional Routines

MLR7 Compare and Connect (Activity 1), Notice and Wonder (Warm-up)

### Materials to Gather

* Tools for creating a visual display: Activity 1

### Lesson Timeline

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

### Teacher Reflection Question

Describe the relationships between place value, multiplication, and division that your students made sense of today.

## Cool-down

(to be completed at the end of the lesson) 10min

Multiplication and Division Equations

### Standards Alignments

|  |  |
| --- | --- |
| Addressing | 5.NBT.A.1 |

### Student-facing Task Statement

Fill in the blank to make each equation true.

### Student Responses

1. 0.6
2. 100
3. 0.06