Lesson 4: Conversión de unidades métricas y división entre potencias de diez

Standards Alignments

Addressing   5.MD.A.1, 5.NBT.A.2

Teacher-facing Learning Goals

- Convert metric lengths from a smaller unit to a larger unit.
- Recognize and explain patterns in the placement of the decimal point when a decimal is divided by a power of 10.

Student-facing Learning Goals

- Convirtamos unidades.

Lesson Purpose

The purpose of this lesson is for students to convert from a smaller metric length unit to a larger unit using a context of track and field. Students observe patterns when different numbers are divided by 10, 100, or 1,000.

In this lesson, students extend their understanding of metric length conversions. In the previous lesson, students converted from a larger unit to a smaller unit, often resulting in very large numbers because they multiplied by powers of 10. In this lesson, students convert from a smaller unit to a larger unit, resulting in a smaller number, and sometimes, a decimal. Students notice how the digits in a number shift to the right when dividing by powers of 10 and consequently whole numbers often become decimals (MP7).

Access for:

♿ Students with Disabilities

- Representation (Activity 1)

Instructional Routines

MLR1 Stronger and Clearer Each Time (Activity 2), True or False (Warm-up)

Lesson Timeline

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

Teacher Reflection Question

If you were to teach this lesson over again, what would you do differently? How would your proposed changes support student learning?

Cool-down (to be completed at the end of the lesson) 🕐 5 min

Lo que Han corrió

Standards Alignments

Addressing   5.MD.A.1, 5.NBT.A.2

Student-facing Task Statement

Han corrió 12,500 metros la semana pasada. ¿Cuántos kilómetros es eso? Explica o muestra cómo razonaste.

Student Responses

12.500 or equivalent

There are 1,000 meters in a kilometer so I need to divide by 1,000. $12,000 \div 1,000 = 12$ and $500 \div 1,000 = 0.500$.