

## Lesson Plan 3A “Measuring with LEGO”

### Materials:

- LEGO bricks
- LEGO base plates
- Objects of different lengths (pencils, erasers, scissors, etc.)
- Boxes or containers to organize the materials

### 1. Start (15 minutes)

#### Welcome and start of activity:

Begin with a friendly greeting and ask the students to take their seats.

Explain to the students that today we are going to work with LEGO bricks and give them an explanation on how to use the material properly (rules).

To activate their sense of touch, ask them to find and touch the LEGO bricks in their boxes. Encourage them to explore the differences between the bricks. Ask: "What do you feel? Are the bricks all the same? What differences do you notice when you touch them?"

**Introduction to the concept:** Explain that they are going to be “architects” and “builders” for a day. To build things, it is important to know how long they are. Introduce the idea that they are going to use the LEGO bricks as “rulers” to measure.

**Guided demonstration:** Ask them to take a LEGO brick and say: "This will be our unit of measurement. We will call it a LEGO unit." Explain that to measure, they will place the bricks side by side on a board, leaving no gaps.

### Development (20 minutes)

#### Activity 1: Exploring lengths (10 minutes):

-Give each student an object (e.g., a ruler) and a LEGO board.

Ask students to place the object on the board.

-Guide them to place their “LEGO units” in a straight line next to the object, from one end to the other.

-As they do so, ask: "How many LEGO units do you think your ruler measures?"

Count them with your fingers as you place them."

-Once they are finished, ask them to tell you how many LEGO units their object measured.

#### Activity 2: Comparing lengths (15 minutes):

-Introduce a second object (e.g., a book or a pen) and ask them to place it on the board.

-Have them repeat the measuring process.

-Once they have measured both objects, guide them to compare the two measurements.

Ask: “Which measured more LEGO units? The ruler or the pen? Why?”

-Explain that the object that measures more LEGO units is longer, and the one that measures less is shorter.

-Organize an exchange of objects with their classmates so they can measure and compare different items. Encourage communication and questions among them.

### **Closing (10 minutes)**

#### **Reflection and group discussion:**

-Ask students to remove the objects and cards from the boards and put them back in their bags.

-Start a reflection conversation: "What did we learn today? Was it easy or difficult to measure with LEGO? Why do you think it is useful to measure things?"

-Summarize the lesson by reinforcing the key concepts: measuring is counting how many units of measurement fit into an object. In this case, the unit of measurement was the LEGO tile.

#### **Real-world connection:**

Ask students if they know of other objects that are used for measuring, such as rulers or tape measures. Explain that these objects also have units, but they are called centimeters or meters. Allow them to touch a wooden meter stick marked with silicone so they can feel the centimeters.

Thank the students for their work and effort. Congratulate them on completing their measurement "constructions."