### 2nd Grade Lesson Plan: Al Voice Assistant & Number Sorting

## **Common Core State Standards (CCSS) Alignment:**

- CCSS.MATH.CONTENT.2.OA.B.2: Fluently add and subtract within 20 using mental strategies.
- CCSS.MATH.CONTENT.2.NBT.A.1: Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones.
- CCSS.MATH.CONTENT.2.NBT.A.2: Count within 1000; skip-count by 5s, 10s, and 100s.
- CCSS.MATH.PRACTICE.MP7: Look for and make use of structure (sorting and ordering numbers).

### **Lesson Title: Al Voice Assistant & Number Sorting**

### **Objective:**

By the end of this lesson, students will be able to:

- 1. Organize numbers in order from smallest to largest.
- 2. Understand how AI uses sorting to help organize information.
- 3. Use the **Elementary School Al Voice Assistant** to explore number patterns and sorting.

#### **Materials Needed:**

- Device with access to the Elementary School Al Voice Assistant
- ✓ Number cards (1-100, 3-digit numbers for advanced learners)
- Small objects (counters, cubes) for hands-on sorting
- Whiteboard or chart paper and markers

#### **Lesson Structure:**

### 1. Introduction (10 minutes)

## Teacher-Led Discussion:

- Begin with a **real-life sorting example**: "How do we put things in order in real life?" (e.g., lining up in order of height, sorting groceries by size, putting books in order on a shelf).
- Explain that AI, or Artificial Intelligence, helps sort things too!
- Show a **simple number set**: 4, 9, 1, 7. Ask: "How can we put these in order from smallest to largest?"
- Introduce the Al Voice Assistant and explain that Al helps sort and organize numbers just like we do.

### 2. Activity (15 minutes)

## in Part 1: Sorting with the Al Voice Assistant

- Open the Elementary School Al Voice Assistant on a device.
- Ask: "Give me five random numbers between 1 and 100." Write them on the board.
- Ask students to sort the numbers from smallest to largest.
- Check their answer by asking the AI: "Now, sort these numbers in order."
- Let students take turns generating and sorting different number sets using the AI.

# • Part 2: Hands-on Sorting Practice

- Hand out number cards (1-100) to student pairs.
- Have students draw five numbers and arrange them from smallest to largest.
- Check their work by **having them ask the AI** to sort their numbers and compare answers.

### 3. Discussion & Reflection (10 minutes)

## Guided Class Discussion:

- Ask: "Why is sorting important?" (e.g., in math, in real life, in technology).
- Discuss how Al helps organize numbers in:
  - o Calendars (putting dates in order).
  - Shopping apps (sorting prices from low to high).
  - Weather apps (sorting temperatures from hottest to coldest).

# Closing Activity:

- Have students write or draw a real-life example of sorting.
- Exit question: "How do you think AI knows how to sort things?"

#### **Assessment:**

- Observe students as they sort numbers.
- Ask guiding questions to check understanding:
  - "How do you know which number is the smallest?"
  - "What strategy did you use to sort your numbers?"
    - ✓ Use students' sorting work and Al interactions as informal assessments.

#### **Extension Activities:**

# For Early Finishers:

- Ask the Al: "Give me five three-digit numbers." Have students sort them from smallest to largest.
  - > For Extra Challenge:
- Introduce **skip-counting sorting** (e.g., Al generates numbers by 5s, 10s, or 100s, and students arrange them correctly).

By integrating the Al voice assistant, students actively engage in sorting and organizing numbers, just like Al does in real-world applications!