**Arizona Standards Alignment**

| **Content Area** | **Standard Code** | **Description** |
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| **English Language Arts** | **ELA.6.RI.1** | **Cite textual evidence to support analysis of informational texts.** |
|  | **ELA.6.SL.4** | **Present claims and findings clearly.** |
|  | **ELA.6.W.2** | **Write informative/explanatory texts.** |
| **Mathematics** | **MA.6.SP.4** | **Display numerical data in plots on a number line, including dot plots and histograms.** |
| **Science** | **SC.6.LS1.8** | **Gather, analyze, and communicate information about organisms.** |
|  | **SC.6.ETS1.1** | **Define criteria and constraints of a design problem.** |
| **Visual Arts** | **VA:Cr2.1.6a** | **Experiment with visual elements to communicate meaning.** |
| **Technology** | **ISTE 4.c** | **Collect data or identify relevant data sets to answer questions.** |
|  | **ISTE 6.a** | **Select appropriate platforms and tools to visualize data.** |

**Lesson 5: Independent Data Inquiry and Presentation**

**Objective**

Students develop a personal inquiry question, collect and visualize data, and present findings with reflection.

**Materials**

* Inquiry planning sheets
* Journals and drawing materials

**Step-by-Step Instructions**

1. **Introduction (I Do):**
   * Model how to create an inquiry question related to daily life or environment.
   * Demonstrate data collection, visualization, and reflective journaling.
   * Show how to prepare a brief presentation of findings.
2. **Guided Practice (We Do):**
   * Brainstorm potential inquiry questions as a class.
   * Plan data collection methods together.
3. **Independent Practice (You Do):**
   * Students select their inquiry question, collect data over time or through observation.
   * Create a visual journal entry including their symbol key and organized layout.
   * Write a short reflection responding to guiding questions.
   * Present findings to a partner or small group.

**Differentiation**

* Provide graphic organizers and simplified prompts for struggling students.
* Offer sentence frames and bilingual support for ELLs.
* Encourage advanced students to design multi-variable or longitudinal inquiries.
* Include movement-based or interactive data collection options for kinesthetic learners.

**Reflection Prompts**

* *What did you learn from your data?*
* *How did creating your own question help your learning?*
* *What was challenging about collecting or visualizing your data?*
* *How could you improve your inquiry or visualization next time?*

**Assessments**

* **Formative:**
  + Confer with students during inquiry planning and data collection phases to monitor progress.
  + Provide feedback on draft visualizations and reflections.
* **Summative:**
  + Use a rubric to assess final inquiry projects evaluating question clarity, data accuracy, visualization quality, reflection depth, and oral presentation skills.