Elementary Math Planning Template

Grade Level and Unit of Study: First Grade

Description of Investigation (set of lessons or specific lesson): Measurement—Measuring Fish

Prerequisites (skills and content required to be successful):

- One-to-one correspondence
- Counting
- Length
- straight line
- gaps
- overlaps

Connections to Standards:

Linear Measurement

- Understanding length
- Using linear units
- Measuring with non-standards units

Materials needed:

- Color tiles
- sticky notes
- student activity book pgs. 5-6
- fish collections

Time Allotted: 60 minutes

Mathematical Objective(s) ***What are your core mathematical ideas for this set of lessons? What do you intend all students to know and understand about mathematics?***	**Language Objectives:** ***What mathematical language will you model during this set of lessons?*** ***What mathematical language do you expect to hear during student discourse?***
• Identifying contexts in which measurement is used. • Using inch tiles to measure objects in inches. • Developing accurate measurement techniques. • Understanding the meaning of *atleast* in context of linear measurement.	• Using terms "atleast, measurement," length in class work and conversation. • New vocabulary word: inch

Connect and Anticipate: ***In what ways does this set of lessons build on students' previous knowledge? What strategies and responses do you anticipate? What misconceptions/struggles might students have?***

Previous Knowledge

- One-to-one correspondence
- Measuring with non standard units
- Counting in order

Misconceptions/Struggles

- Where to begin and end measuring
- Concept of a tile being one inch and not a snap cube (or other manipulative)

Please note: For this section, focus on one lesson within the investigation.

Focus Questions

Consider what questions you will use to focus on students' thinking to encourage sense-making and discourse.

LAUNCH: To introduce the activity

- If I wanted to move a piano into our classroom through the door, how could measurement help?
- Has anyone gone fishing?
- Can you think of something that is about 1 inch long?
- Where do I begin measuring? Where do I end measuring?
- Is this tile an inch long side to side and corner to corner?

EXPLORE: To assess students' understanding and to advance their thinking as they work independently, in partners or small group

- How long is Kim's fish?
- Is Kim's fish a keeper?
- How many inches long is this fish?
- How can we measure? Where do we begin? Where do we end?
- Should we have gaps (spaces) or overlaps ?

SUMMARY: To facilitate the analysis and synthesis of ideas shared at the end of the lesson

How can we measure Alewife Fish D?
What should we make sure we do when measuring?
How can we write one half (1/2)?
(Consider flexible groupings during this set of lessons.)

Evidence: ***How will you know what all students understand each day to inform daily instruction? What evidence will you collect during this set of lessons?***
If there are exit tasks, what will be the focus to inform your instructional next steps?

Complete Assignment/Small Group Discussion
Informal Assessment

- Do students understand the concept of *atleast* in the context of measurement?
- Are students using good measurement?
- Are their measurements accurate?
- Do students use the word inch to refer to the length of the tile and as the measurement for determining the length of keepers?

Notes and Reflections:

- Assignment went well.
- All students were engaged.
- All students reflected on measurement criteria (good measurement).
- Most students used term "inches."