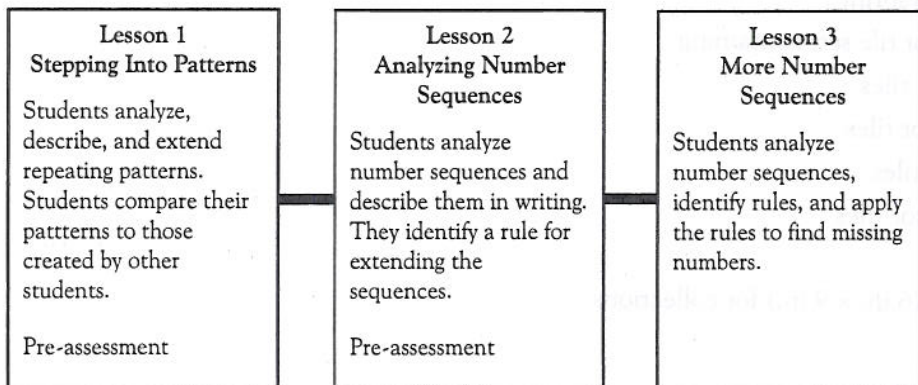


Conceptual Story

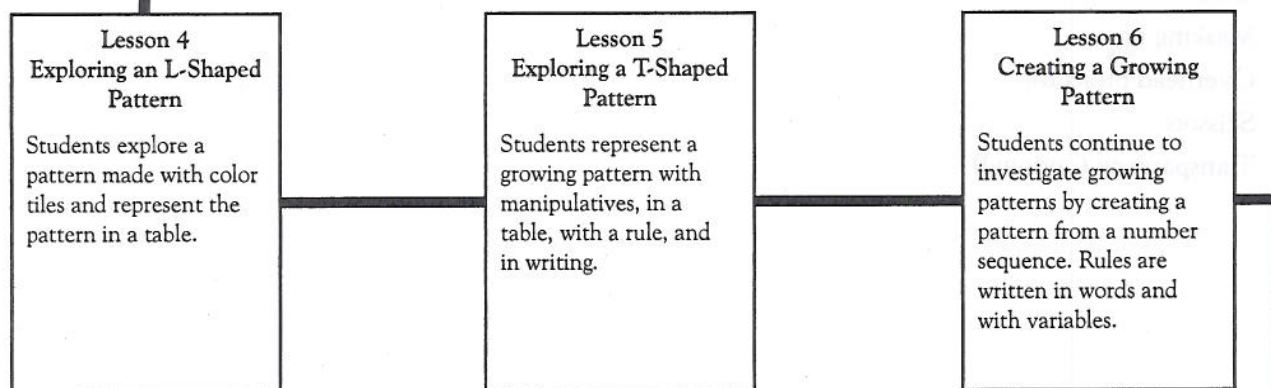
Developing Algebraic Thinking: Steps and Distance

Big Idea: Patterns are in the world around us.

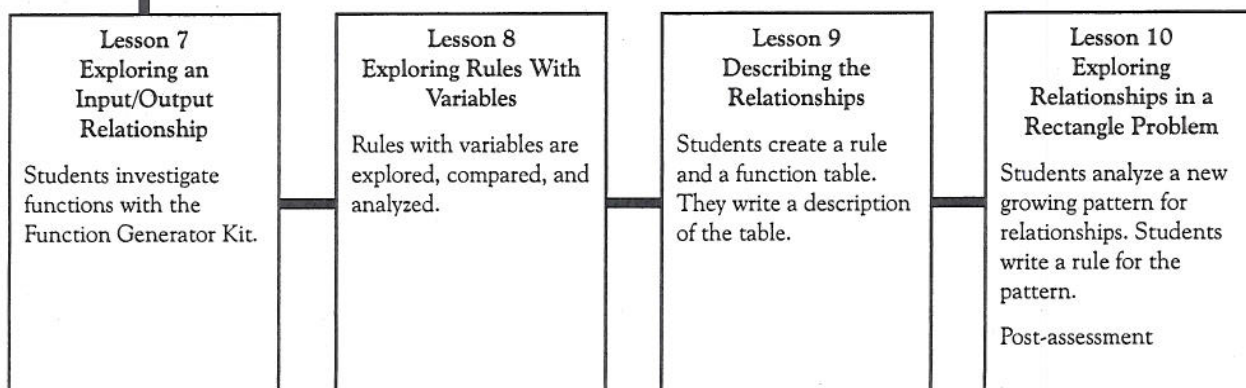
Subconcept: Patterns can be analyzed and described.



Subconcept: Rules can be represented with words and with variables.



Subconcept: Functions can be represented in a variety of ways.



Big Idea: Data can be collected about the world around us.

Subconcept: A plan to collect data can be developed.

Lesson 11
Asking Questions

Students collect data, organize the data in a table, and draw conclusions about it. Questions are generated about steps.

Pre-assessment

Lesson 12
The Mean of the Data

Students analyze their individual data to find the mean by leveling the data. They verify their mean with an algorithm.

Lesson 13
Displaying Data in a Line Plot

Data is collected and displayed in a line plot. The mode, median, and range of the data are determined.

Subconcept: Data can be analyzed and described.

Lesson 14
Exploring the Pedometers

Pedometers are introduced as a tool for collecting data. A list of questions is brainstormed.

Lesson 15
Collecting More Data With the Pedometers

Students make and support predictions about step counts. Students share their ideas about the prediction process.

Lesson 16
Displaying Data in a Line Graph

Data is analyzed for relationships. Predictions are made based on the data in a line graph.

Subconcept: A story can be told about the data.

Lesson 17
Exploring Categorical Data

A plan is made and implemented to collect categorical data from a sample population.

Lesson 18
Displaying the Data

Students follow their plan to collect, display, analyze, and draw conclusions about their data.

Lesson 19
Stem and Leaf Plot

Data is displayed in a stem and leaf plot. The numerical data is analyzed for range, mean, median, and mode.

Lesson 20
Designing an Investigation

Students choose a question to investigate, develop a plan, collect the data, and tell the story of the data.

Post-assessment

