TEKS Cluster: Whole Number Operations
TEKS Subcluster: Numerical Patterns
Student Expectations: 4.5(B)
Activities Summary: Students begin the numerical, algebraic reasoning that they will use through Algebra 1. They use number machines, known in high school as function machines, to create tables and understand the numerical relationships within the tables. They also use the tables to write sequences. The How-To Guides in this subcluster contain guided questions that develop these relationships.

Activity Title Student Expectations	**Activity Topic**	**Type**			**Delivery**		
		new learning	intervention	practice	teacher-facilitated	small groups	stations
The Number Machine 4.5(B)	**Numerical Rules and Tables** Students fill in number machines, draw models, fill in tables to represent real-world relationships. They use the numerical relationship to answer questions and write math facts to explain their thinking.	✓	✓		✓		
Number Machines + Number Patterns 4.5(B)	**Numerical Expressions – Tables – Number Patterns** Students fill in number machines, draw models, fill in Input-Output tables and Position-Value tables to represent a real-world relationship. They write the numerical sequence that represents the outputs.	✓	✓		✓		
Wonderful Wolves 4.5(B)	**Tables – Number Patterns – Numerical Relationships** Students fill in number machines and tables to represent real world relationships, write sequences, and answer questions based on data in the table.		✓	✓		✓	
Anchors Aweigh 4.5(B)	**Tables – Number Patterns – Sequences** In this activity, students are given cards with rows of tables. They build the tables based on problem situations and write in the numerical expressions.			✓		✓	
Weigh In 4.5(B)	**Tables – Number Patterns – Numerical Relationships** Students fill in number machines and tables to problem situations, write sequences, and answer questions based on data in the table.			✓		✓	
Dogs, Dogs, Dogs 4.5(B)	**Tables – Number Patterns – Numerical Relationships** Students match number machines, tables, problem situations, and sequences. They answer questions based on data in the table.			✓		✓	