Number Sense Activity Lesson Planning Template

Date: 2/18/2020 **Grade**: 8

Core Math Idea: Linear Functions **Unit:** Module 4

Learning Goals: Students will understand

1. That linear functions grow/shrink at a constant rate, meaning that the function will increase or decrease by the same amount over the same interval
2. The connection between tables, graphs, equations, charts, descriptions, and pictures by being able to identify the constant rate and initial value in each representation.

Number Sense Activity/Problem: Visual Pattern	Possible strategies and method of recording	Questions to students
 1. Describe the pattern in 1 sentence. What do you notice? 2. Represent the pattern by making a table, equation, or graph	Table Graph Equation Description with words Student thinking will be represented on the blank space on the tv screen	*How do you see this pattern growing?* *How would we write an equation to represent this situation?* *What is changing in each consecutive step? What is staying the same?* *Why is the 2 with your variable?* *How many trees would there be in Step 0? How do you know?* *Where do we see the rate/slope in the table? In the graph? In the equation?*
Follow up Problems	**Academic Language**	**Wrap Up**
None since this is a Do Now activity	Rate of change; initial value; y-intercept; rate; slope; constant; slope-intercept form; graph, table, equation	From this activity, we can see that rates, initial values, and linear equations can be represented in several different formats such as pictures, tables, equations, and graphs.