

Any standard **highlighted in yellow** has been determined by our WCSD teachers, district and state experts as essential for students to master.

Strand: I can build a function that models a relationship between two quantities.			
Standard 9.F.BF.1: I can write a function that describes a relationship between two quantities.			
<p>Learning Targets</p> <ul style="list-style-type: none"> I can determine an explicit expression, a recursive process, or steps for calculation from a context. I can combine standard function types using arithmetic operations. I can find an expression, recursive process, or steps to model a context with mathematical representations when given a linear or exponential context. I can combine linear and/or exponential functions using addition, subtraction, multiplication, and division. 	<p>Academic Vocabulary & Notation</p> <ul style="list-style-type: none"> function, intercepts, explicit expression, recursive, 	<p>Question Stems</p> <ul style="list-style-type: none"> How did you get your answer? What were the steps involved? Justify your answer. 	<p>Possible Assessments</p> <ul style="list-style-type: none"> <u>District CFAs</u>
Standard 9.F.BF.2: I can write and use arithmetic and geometric sequences to model situations and translate between the two forms.			
<p>Learning Targets</p> <ul style="list-style-type: none"> I can write arithmetic sequences both recursively and with an explicit formula. I can write geometric sequences both recursively and with an explicit formula. I can model contextual situations with arithmetic or geometric sequences. 	<p>Academic Vocabulary & Notation</p> <ul style="list-style-type: none"> arithmetic sequence, geometric sequence, recursive, explicit 	<p>Question Stems</p> <ul style="list-style-type: none"> How would you explain.....to a student in grade? This math idea is like..... I solved the problem by..... 	<p>Possible Assessments</p> <ul style="list-style-type: none"> <u>District CFAs</u>

Strand: I can build a function that models a relationship between two quantities.			
Standard 9.F.BF.3: I can identify the effect on the graph of replacing $f(x)$ by $f(x) + k$ for specific positive or negative values of k.			
<p>Learning Targets</p> <ul style="list-style-type: none"> I can find the value of k given the graph of a linear or exponential function. I can experiment with cases and illustrate an explanation of the effects on the graph using technology. I can perform vertical translations on linear and exponential graphs. I can relate the vertical translation of a linear function to its y-intercept. I can describe what will happen to a function when $f(x)$ is replaced by $f(x) + k$ for different values of k. 	<p>Academic Vocabulary & Notation</p> <ul style="list-style-type: none"> translation, transformation, y-intercept, vertical shift 	<p>Question Stems</p> <ul style="list-style-type: none"> What are the key points or big ideas? Find and explain the pattern. How does this relate to.....? 	<p>Possible Assessments</p> <ul style="list-style-type: none"> <u>District CFAs</u>