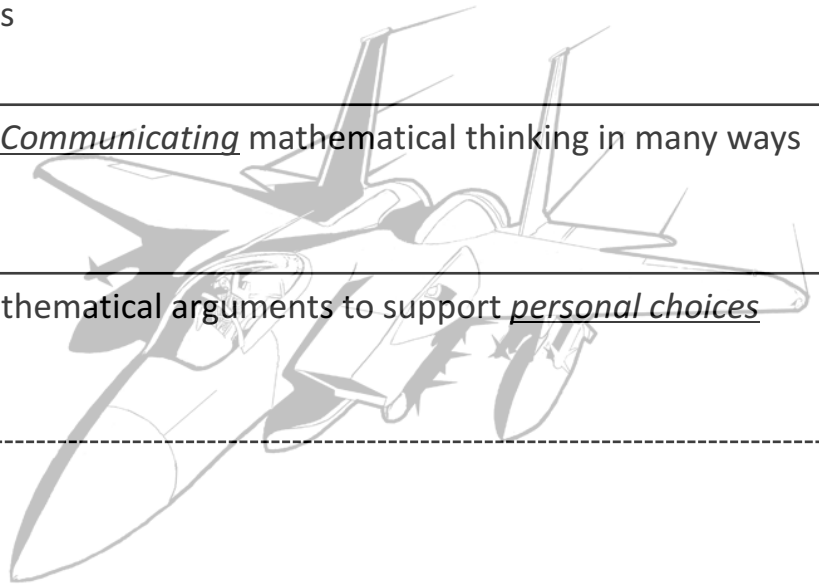
Backward Design Unit Planning Template: Building the Curricular Plane

Grade: 8	**Subject Area(s): Math**	**Planning Team: Sheena & Team at Nakusp Secondary**
Big Idea: *Discrete linear relationships* can be represented in many connected ways and used to identify and make generalizations.		Unit Guiding Question(s): What a discreet linear relationship? Why is it useful in the world?
Content Goal	I know discreet linear relations that include large number and integers	
Curricular Competency Goal	I can reason and analyze by using tools or technology to explore and create patterns and relationships, and test conjectures	
Curricular Competency Goal	I can understand and reason by applying *multiple strategies* to solve problems in both abstract and contextualized situations	
Curricular Competency Goal	I can communicate and represent by *Communicating* mathematical thinking in many ways	
Curricular Competency Goal	I can connect and reflect by using mathematical arguments to support *personal choices*	



Course/Subject/Grade(s): Math 8		**Planning Team: Sheena, Shelley & Nakusp Secondary**			
Unit Guiding Question: What a discreet linear relationship? How & Why are discreet linear relationships useful in the world?					
Goals		This is what I **nee**d to know and do	This is what I **must** know & do	This is what I **can** know & do	This is what I **could** know & do	This is what I **can try to** know & do
Content: I know discreet linear relations that include large number and integers		I know what a variable is I know what a linear relation is I know parts of a graph	I know two-variable discrete linear relations I know expressions, table of values, and graphs	I know scale values	I know four quadrants and integral coordinates	I know more complex numbers
Curricular Competencies:	I can **reason and analyze** by using tools or technology to explore and create patterns and relationships, and test conjectures	I can identify the possible tools or technology needed	I can use tools or technology to create patterns (I can create a pattern…)	I can use tools or technology to describe relationships (I can describe the pattern)	I can use tools or technology to test conjectures (I can draw conclusions of a pattern)	I can use multiple tools and technology
	I can **understand and reason** by applying *multiple strategies* to solve problems in both abstract and contextualized situations	I can apply one strategy from a model	I can apply familiar strategies (I can apply strategies that I have been taught) - contextual	I can apply personal strategies (I can apply a strategy that works for the task) - contextual	I can apply cultural strategies (I can apply a strategy from another perspectives)	I can apply personal strategies (I can apply a strategy that works for the task) - abstract
	I can **communicate and represent** by *Communicating* mathemati cal thinking in many ways	I can communicate my learning by following a model	I can communicate my thinking in one way (concrete, pictorial, abstract)	I can communicate my thinking in two way (concrete, pictorial, abstract)	I can communicate my thinking in any way (concrete, pictorial, abstract)	I can integrate my thinking in all way (concrete, pictorial, abstract)
	I can **connect and reflect** by using mathematical arguments to support *personal choices*	I can connect math to my life	I can connect to and reflect on mathematical arguments	I can use mathematical arguments to support personal choices	I can anticipate possible mathematical consequences	I can adjust my choices based on possible e mathematical consequences

Curricular Competency Mini Lesson Planner

Course/Subject/Grade(s): 8			
Unit Question: What a discreet linear relationship? How & Why are discreet linear relationships useful in the world?			
Chunk 1	Weekly competency question: How can we reason & analyze by using tools and technology?		
	Mini Lesson: We can use tools or technology to create patterns	Mini Lesson: We can use tools or technology to describe relationships	Mini Lesson: We can use tools or technology to test conjectures
	Content used to teach competencies: two-variable discrete linear relations, expressions,		
Chunk 2	Weekly competency question: How can we understand and reason by applying multiple strategies to solve problems?		
	Mini Lesson: We can apply familiar strategies (I can apply strategies that I have been taught)	Mini Lesson: We can apply personal strategies (I can apply a strategy that works for the task)	Mini Lesson: We can apply cultural strategies (I can apply a strategy from another perspectives)
	Content used to teach competencies: table of values, and graphs		
Chunk 3	Weekly competency question: How can we communicate and represent by showing our thinking in many ways?		
	Mini Lesson: We can communicate thinking in one way (concrete, pictorial, abstract)	Mini Lesson: We can communicate thinking in two way (concrete, pictorial, abstract)	Mini Lesson: We can communicate thinking in any way (concrete, pictorial, abstract)
	Content used to teach competencies: scale values		
Chunk 4	Weekly competency question: How can we connect and reflect by using mathematical arguments to make personal choices?		
	Mini Lesson: I can connect to and reflect on mathematical arguments	Mini Lesson: I can use mathematical arguments to support personal choices	Mini Lesson: I can anticipate possible mathematical consequences
	Content used to teach competencies: four quadrants and integral coordinates		