

STEM Growth Plan

Team Name: Clintondale High School: Dragon Warriors

Start Date: March 09, 2015

End Date: June 11, 2015

Vision: Collaborate with the day school teacher to assist students in becoming proficient in Geometry by learning more about Tessellations.

GROWTH GOAL	ACTION STEPS	MEASUREMENT OF SUCCESS	SPECIFIC DATES	WHO'S RESPONSIBLE	EDUCATIONAL IMPLICATIONS
Students will become familiar with Tessellations by making use of Polygons	<ol style="list-style-type: none"> 1) Place students in groups 2) Distribute Attribute blocks 3) Explain Tessellations 4) Model 5) Ask students to create 	Students will be able to create their own tessellations and present their final project to the class.	3/2/2015-3/9/2015	Day school Math Teacher: Mr. Batanjski After school Coordinator: Mrs. Hall	Math Standards: <ul style="list-style-type: none"> • Geometry • Operations and Algebraic Thinking • Measurement Data
Students will incorporate the use of Technology by creating Tessellations with basic CAD software and polygons	<ol style="list-style-type: none"> 1) Groups will remain the same 2) Groups will take their journal/log book to computer lab to assist in designing 3) Model with students on how to use CAD software 4) Ask students to create 	Students will create their tessellations by making use of technology (CAD Software)	3/16/2015-4/13/2015	Day school Math Teacher: Mr. Batanjski After school Coordinator: Mrs. Hall	Math Standards: <ul style="list-style-type: none"> • Geometry • Operations and Algebraic Thinking • Measurement Data
Students will become familiar with how to safely and effectively use the 3D-Printer in order to create their own tessellations base3d off of their groups original	<ol style="list-style-type: none"> 1) Have student groups sit in their assigned area 2) Students will be instructed on how to use the 3D-Printer 	Students will be able to make use of the 3D – Printer by printing out a polygon	4/20 – 5/18	Day school Math Teacher: Mr. Batanjski After school Coordinator: Mrs. Hall	Math Standards: <ul style="list-style-type: none"> • Geometry • Operations and Algebraic Thinking • Measurement Data

design	(This will be done over a period of two-weeks) 3) Student groups will begin to utilize printers				
Art Standard: Students will begin to prepare for their art show	1) Students will begin to compile their tessellations from their journal/log to first tessellation (hand drawn) to CAD design – to 3D Printer Design; which will be displayed in an end of the year Art Show	Students will be able to explain to their audience what at tessellation is and what shapes and/or designs they used. They should also be able to explain and display their CAD designs as well as their 3D Printer designs.	5/25 – 6/1	Day school Math Teacher: Mr. Batanjski After school Coordinator: Mrs. Hall	Math Standards: <ul style="list-style-type: none"> • Geometry • Operations and Algebraic Thinking • Measurement Data

STEM Growth Plan

Team Name: Warren Mott

Start Date: 02/23/2015

End Date: 06/11/2015

Vision: Create a shared learning experience that builds skill and confidence in science and math.

Growth Goal	Action Steps	Measurements of success	Specific Dates	Who's Responsible	Educational Implications
Chemical Reactions (Chemistry) -Differentiate between 5 types of Chemical Reactions -Create/model and provide example of each.	In Class~ -Introduce Chemical Reactions C2~ -Labs -compare, analyze, and record chemical reactions by combining various materials.	In class~ -Written tests, quizzes, and lab assignments. C2~ -Experiments and reflections	02/23/2015	Oldenhouse & Christenson	-Critical thinking -Designing a chemical system -Explain outcomes -Teambuilding -Cooperative learning
Balancing Chemical Equations using Mathematical Representation (Chemistry)	In class~ -step-by-step procedure C2~ -Games -Practical Application	In class~ -Written tests, quizzes, and lab assignments. C2~ -Experiments and reflections	03/05/2015	Oldenhouse & Christenson	-Critical thinking -Using math & computational thinking to support conservation of mass.
Stoichiometry -Converting everyday calculations into chemistry equations	In class~ -Define Stoichiometry C2~ -Practical Application	In class~ -Written tests, quizzes, and lab assignments. C2~ Experiments and reflections	03/19/2015	Oldenhouse & Christenson	Critical thinking -Using math & computational thinking to build