Andrew Schwarz

Math 304

Dr. Olsen

March 23, 2016

Idea File #4

Sweet Graphing

**Mathematical topic**- Graphing a function using Twizzlers.

**Purpose or objective(s)-** the purpose of the activity is to get students away from the paper and pencil way of graphing. This activity is fun and engaging for them. The students will learn how to set up a graph with an x input and a y output. This will help students with graphing a fuction.

**Overview**- The activity will consist of students having a function infront of them and they will have to graph it using the Twizzlers. Once the lesson is over the studnets will be allowed to eat them. I understand it won’t be a “perfect” graph. What I am looking for is that the students will become more confident with graphing and have fun doing it.

**Common Core State Standard(s)**- CCSSM:A-CED.2. The students will be graphing equations on coordinate axes with labels and scales.

**Mathematical practice**- Model with mathematics, because the students are actually modeling what is being asked of them and in this case it is graphing.

**Grade levels**- High School Algebra

**Background knowledge requird of students**- the students will need have an understanding of how to graph, and they should know how to find inputs and outputs.

**Source of activity**- Andrew Schwarz

**Time**- 25-30 minutes

**Materials needed**- graphing paper, pencil, and Twizzlers.

**Type of activity**- this activity is predominatly a lab activity. It is a lab activity because of the students will be working on a worksheet. The studetns can work in groups of 2 or 3 people at most.

**Why you picked the activity**- I picked this activity because it is a fun way to learn how to graph. The studetns will enjoy getting away from the traditional pencil and paper graphinh.

**Follow up activity and/or extenstions**- After this activity I will most likely have the students go back to the traditional pencil and paper graphing. I would do this becucase after the activity the students should have a better understanding of how to graph.

**Strengths of the activity**- The streghts of the activity are students building confidence in their graphing abilitys, and getting them out of their normal routines.

**Weakness of the activity**- Some students may not get the whole understanding of what the activity is about and why they have to do it. Or some students maybe upset because they don’t like Twizzlers.

**Procedure- detail of what the teacher and students will be doing-**

 The procedure is as followed:

I will hand out the worksheet first and go over it with the students. Once I finished explaining the activity I will then hand out the Twizzlers. Once the Twizzlers are out the students will than begin working on the worksheet to find the graphs of the funcitons. The worksheet will consist of about 10 questions for the students to work on. When the students finish a graph I will have them raise their hands and I will come check on it to make sure it is right. If it is right I will have them go on, if it is not right I will ask them a question in order to help them get to the right graph. If the students do have a question to raise their hand.

Graphing worksheet #1 Name.

#1 Graph y=x

#2 Graph y=2x+1

#3 Graph $y=\frac{2}{3}x+3$

#4 Graph $y=3+4x+(2-x)$

#5 Graph $y=x^{2}$

#6 Graph $y=(x-1)\^2$

#7 Graph y=2x+4x-5x=7x-2

#8 Graph y=5

#9 Graph x=5

#10 Graph x=2y-4