

Act 1 Guide Completed Individually

Name:

Date:



1. Running burns off more calories than walking. Basketball burns off more calories than golf. Do you think weight impacts the number of calories burned? Choose three different weights and fill in the chart below:

	Weight:	Weight:	Weight:
Jogging 0.063 cal/lb			
Walking 0.019 cal/lb			
You choose:			

Calories Burned By Different Activities (per minute)

Walking:	0.019 cal/lb	Tennis:	0.061 cal/lb
Bowling:	0.023 cal/lb	Basketball:	0.064 cal/lb
Biking slowly:	0.029 cal/lb	Jogging:	0.063 cal/lb
Golf:	0.033 cal/lb	Swimming:	0.064 cal/lb
Weight training:	0.039 cal/lb	Soccer:	0.053 cal/lb
Biking fast:	0.045 cal/lb	Mowing the lawn:	0.051 cal/lb
Raking leaves:	0.025 cal/lb	Shoveling snow:	0.045 cal/lb
Playing hacky sack:	0.030 cal/lb	Playing frisbee:	0.023 cal/lb
Backpacking:	0.053 cal/lb	Wrestling:	0.045 cal/lb

<http://whatscookingamerica.net/Information/CalorieBurnChart.htm>

<http://www.nutristrategy.com/activitylist4.htm>

2. What factors determine how many calories you burn?

3. How could you double the number of calories you burn?

4. How much exercise would it take to burn off these different menu items at McDonald's? Fill in the chart below. In the blank cells put the number of minutes it would take to burn off the calories from each item using the exercise chosen.

Weight:	Big Mac Calories:	Large Drink Calories:	Large Fries Calories:
Exercise: cal/lb:			
Exercise: cal/lb:			
Exercise: cal/lb:			

5. What are the total calories for the meal above?

6. Create an equation and a graph showing calories burned vs. time for 5 different exercises.

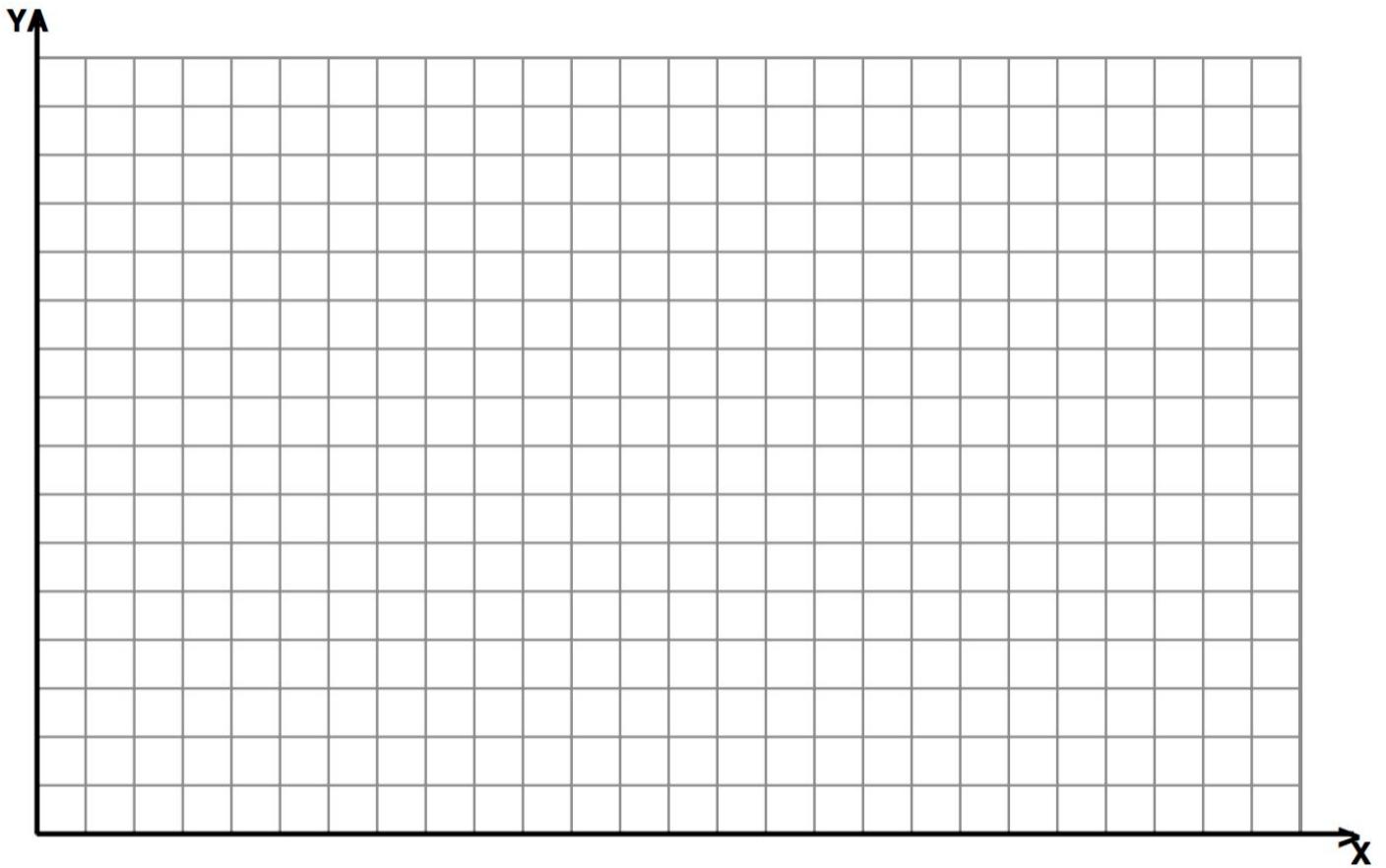
Equation 1:
Description:

Equation 2:
Description:

Equation 3:
Description:

Equation 4:
Description:

Equation 5:
Description:



7. What does the slope of your graphs tell you?

8. What does the y-intercept of your graphs tell you?

Project 1: Create a meal from your favorite fast food restaurant that can be burned off by running: 1 mile, 5 miles, and 10 miles. Each meal must include an entree, a side and a drink. Dessert is optional. Using Google Slides make at least a 2 slide presentation of your meals. Include a reflection of what you learned from this project on the class page in Edmodo. Use the rubric below.

Criteria	1 Not Yet	2 Almost	3 Got It
<i>Knowledge About Calories</i>	One or fewer meals contain entree, side and drink. Calories burned are incorrectly calculated. One or fewer meals can be burned off with given criteria.	Two meals contain an entree, side and drink. Calories burned are calculated correctly but not all meals can be burned off with given criteria.	All meals contain an entree, side and drink. Calories burned are calculated correctly and each meal is able to be burned off with given criteria.
<i>Mathematical Concepts</i>	Proportions are not used for majority of calculations. Units are inconsistent.	Proportions are used for most calculations. The majority of units are consistent.	Proportions are used for all calculations and units are consistent.
<i>Effort</i>	Presentation contains little color, few or no graphics, too much or no text. It shows a clear lack of effort.	Presentation contains color, some graphics, too much text. It is somewhat pleasing to the eye.	Presentation contains color, graphics, and minimal text. It is pleasing to the eye.
<i>Quality</i>	Presentation is disorganized and hard to understand.	Presentation is somewhat organized and somewhat easy to understand.	Presentation is well organized and easy to understand.
<i>Reflection</i>	Reflection shows minimal thought and learning. Poor or no understanding of calories and exercise is demonstrated.	Some thought given to reflection on experience and what was learned. Basic understanding of calories or exercise is shown.	Reflection on experience and what was learned shows deep thought and effort put into project. Clear understanding of calories and exercise is demonstrated.

Project 2: You will keep track of your daily food intake and calories consumed during the first two parts of this project. You should create a spreadsheet for this information and update it daily.

References

Calories Burned During Exercise (n.d.). Retrieved from <http://www.nutristrategy.com/activitylist4.htm>

What About Exercise? (n.d.). Retrieved from <http://whatscookingamerica.net/Information/CalorieBurnChart.htm>

Coordinate Plane Graph Paper (n.d.). Retrieved from http://www.math-aids.com/cgi/pdf_viewer_4.cgi?script_name=graphing_coordinate_plane.pl&size=5&numbered=0&memo=&x=93&y=15