Activity: **Moon Walk** Name:

If you could walk to the moon, about how long would it take? Huh?

Here is an investigation that, at first, may seem impossible to do. But if you take it apart, step by step, you'll be surprised at how quickly you'll be off and running. You may use a calculator for this activity.

You really only need two pieces of information: how fast you walk and how far it is to the moon.

1) Find the distance to the moon in miles. You may use any available resources that your teacher provides.

2) How can you determine your walking speed? What tools do you need?
Mark off a distance of at least 20 meters to walk. Time one person as they walk the given distance. From this information determine how many meters per second he or she can walk.

3) Since the distance to the moon is in miles and your walking speed is in meters per second, you will need to covert the speed to miles per second. To change meters per second to miles per second, divide your answer in #2 by 1603.3.

4) Now that you have the number of miles to the moon and your speed, you can determine how long it will take you to walk to the moon. Your initial answer will be in seconds…a very big number! Convert your answer to minutes, hours, days, and years (assume 365 days in a year).

5) Repeat the process above if you were going to walk to Washington, D.C.

Miles to the moon	
Walking speed (meters/sec)	
Walking speed (miles/sec)	

Time required…	**To the moon**	**To Washington, D.C.**
Seconds		
Minutes		
Hours		
Days		
Years		

Activity: **Submarine Sandwich** Name:

How many submarine sandwiches would be in a line that stretches from our school to the White House in Washington, D.C. Huh?

Here is an investigation that, at first, may seem impossible to do. But if you take it apart, step by step, you'll be surprised at how quickly you'll be off and running. You may use a calculator for this activity. You really only need two pieces of information: how big a sub sandwich is and how far it is to Washington, D.C.

1) Find the distance to Washington, D.C. in miles. You may use any available resources that your teacher provides.

2) You will need to determine the length of a typical submarine sandwich in inches.

3) Since the distance to Washington, D.C. is in miles and your submarine sandwich is measured in inches, you will need to do a conversion to determine how many miles long one submarine sandwich is. One inch is equal to 0.000015783 miles (one mile is equal to 63,360 inches).

4) Now that you have a common set of units, you can determine the number of submarine sandwiches necessary to reach Washington, D.C. After you determine this, complete the rest of the tables below.

5) Repeat the process above if you were going line up submarine sandwiches to the moon.

Miles to Washington, D.C.		**Meat per sub**	
Length of one sub (inches)		**Tomatoes per sub**	
Length of one sub (miles)		**Lettuce per sub**	
		Mayonnaise per sub	
Cheese per sub		**Cost per sub**	

	To Washington, D.C.	**To the moon**
Submarine sandwiches required		
Slices of cheese		
Amount of meat		
Number of tomatoes		
Amount of lettuce		
Amount of mayonnaise		
Total cost		

Created by Lance Mangham, 6th grade teacher, Carroll ISD