Metric Olympics

Background

The Olympic motto is Citius—Altius—Fortius, which is Latin for "faster, higher, stronger." The intended meaning is that one's focus should be on bettering one's achievements, rather than on coming in first.
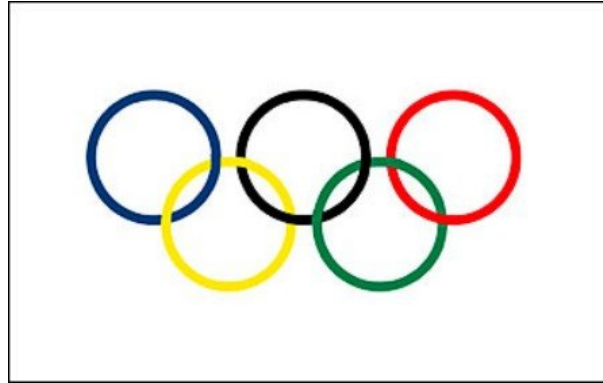
Each of the five Olympic rings (see upper right) is a different color. Together, they represent the five inhabited continents, although no particular ring is meant to represent any specific continent. (The Americas are treated as one continent.) The rings are interlaced to represent the idea that the Olympics are universal, bringing athletes from the entire world together.

The ancient Greeks believed that fire was given to mankind by Prometheus, and considered fire to have sacred qualities. Eternal flames burned in front of Greek temples, flames lit using the rays of the sun. Greek rituals also included torch relays, although this was not actually part of the ancient Olympic Games. The Olympic flame is lit in front of the ruins of the Temple of Hera in Olympia, emphasizing the connection between the ancient Games and the modern Games.

The Olympic Oath is taken by one athlete and one judge from the home nation during the Opening Ceremony of every Olympics, acting on behalf of all the competitors and judges.

As a class…please recite the following with me.

"In the name of all the competitors I promise that we shall take part in these Olympic Games, respecting and abiding by the rules which govern them, committing ourselves to a sport without doping and without drugs, in the true spirit of sportsmanship, for the glory of sport and the honor of our teams"

Objective

Students will become familiar with the metric units by estimating and measuring in a "Metric Olympic" setting.

Materials

Paper plates, drinking straws, marbles, meter sticks, ESRT ruler, cotton puffs, large sponge, large bowl, graduated cylinder, graph paper, digital scale and worksheet

Procedure

1. There are a total of 6 stations with a different task at each. Each station will have a task card with complete instructions and materials.
2. There is NO practicing of events!
3. When measuring, round all values to the nearest 10th. If you measured 1.55 grams, you would round to 1.6 grams.
4. Read the instructions.
5. Before you begin the task, you must make and record an **Estimated Value** of how you think you will perform at this station in the data table.
6. After your guess has been recorded, you may begin the event at the station you are at.
7. After you perform your event, you must measure and record your **Accepted Value** results in the data table. This is the value you just got doing the event.
8. Calculate the difference between your **Estimated Value** and your **Accepted Value** result. Record this in the **Difference from accepted value** column.
9. Using your ESRT, calculate your percent deviation and record it in the **Percent (%) deviation from accepted value** column.
10. When you finish the task at that station, place all materials back the way you found them. Do not rotate until you are told to do so.
11. Each group will work at one station. When time is called, your entire group will rotate to the next station.
12. When you arrive at the next station, follow the directions on the card.
13. Repeat this procedure until all stations are visited in order.
14. After all stations are completed, total up all of values in the **Difference from accepted value** column and record that result, along with your name on the blackboard.
15. After the data table has been filled out in its entirety, complete the "Metric Scavenger Hunt." Whatever you do not finish on this can be completed for homework using your ESRT.
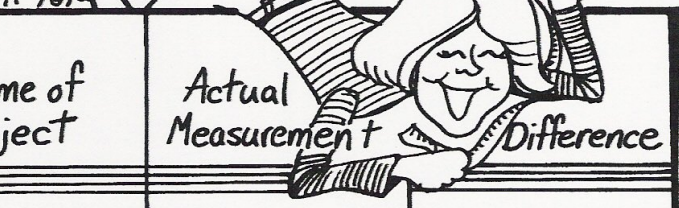
Metric Olympics Data Table

Event	Estimated Value	Accepted Value	Difference from accepted value	Percent (%) deviation from accepted value (see your ESRT)
Paper Plate Discus	cm	cm		
Straw Javelin	cm	cm		
Cotton Ball Shot Put	cm	cm		
Right handed sphere grab	g	g		
Left handed sponge squeeze	ml	ml		
Big Foot Contest	cm^2	cm^2		
Total (add up all of the values from the Difference from accepted value column)				

METRIC SCAVENGER HUNT

Try to find objects of these lengths	Name of Object	Actual Measurement	Difference
1. 40 cm			
2. 87 cm			
3. 3 cm			
4. 1 m			
5. 31 cm			
6. 1.5 m			
7. 65 mm			
8. 240 mm			
9. 28 cm			
10. 2 mm			
		✪ Total Differences ✪	