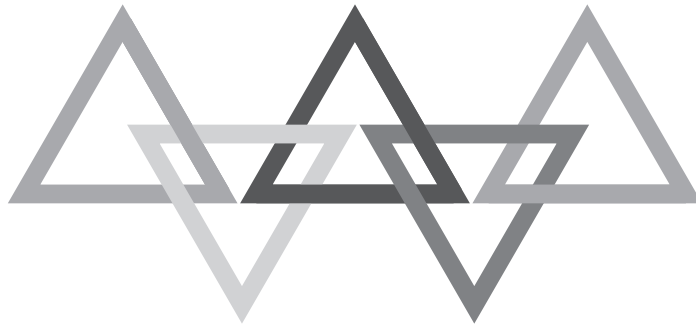


# The West Gresham Buddy Olympics

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THE 2008 SUMMER OLYMPICS, officially known as the Games of the XXIX Olympiad, were held in Beijing this last August. The 21st Winter Olympics will take place in 2010 in Vancouver, British Columbia. Watching and anticipating all this has sparked a bit of Olympic fire in our hearts. We will use this article to describe a series of activities we've done in the past with our classes to connect mathematics to such a high interest, real life event.

What came to mind first was utilizing the wealth of available statistics. Students were given a topic to research independently. They were asked to pick their favorite Olympic event. Then they were given a Notes Sheet to organize the information they found out about that event (e.g. who won medals in that event, what record breaking statistics were available, history of the event, biographies of athletes who competed in the event). As a part of their oral report of their findings to the class, they were required to create one data display of some of



the information they found out. The education page of the official Olympic website is one good source for finding all kinds of Olympic statistics ([http://www.olympic.org/uk/passion/studies/index\\_uk.aspx](http://www.olympic.org/uk/passion/studies/index_uk.aspx)). A file of data for the 2008 Olympics has been collected by Bob Albrect and has been uploaded to the OCTM Web site

We were able to find many great books about the Olympics. I asked our school librarian to check out a class set of books and supplemented with some I found at the county library. My students loved browsing through this collection during Drop Everything and Read (DEAR) time.

During the weeks leading up to a special day we were planning to celebrate the Olympics, I read aloud from the book *Hour of the Olympics* by Mary Pope Osborne. Another class favorite was *Bright Path: Young Jim Thorpe* by Don Brown.

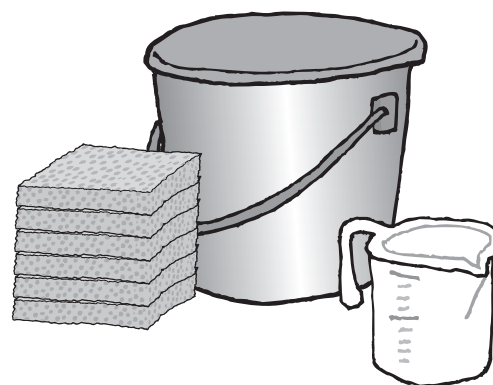
To get ready for the special celebration day, we planned a lot of these joint projects. We decided to call the events for that day The West Gresham Buddy Olympics. Our plan was to match our students up, divide the partners into two groups, have each of the groups report to one of our classrooms and have them rotate through a series of Olympic-themed math stations. There were two sessions of about an hour and a half each. One was held in the morning and the other in the afternoon. This allowed us to flip flop the group of students coming to our room so that the sets of partners could rotate around and complete all events located in both classrooms. The two partners were given station contracts to use to keep track of the Olympic events they participated in and record the math (See Figure 1). It was the younger partner's job to take the lead in recording the estimate and actual measures. The older partner's job was to coach the younger partner if he or she was having any difficulty with the measures. It was also their job to take the lead on calculating the differences between the estimate and the actual measurements. Each partner had their own record sheet and recorded their own data, but as I said above, we told the class before they got started that we wanted both partners to be responsible for different parts of the activity so that there would be a lot of collaboration and discussion between the two partners as they worked through the activities and filled in their record sheets.

The day after the events we had an awards ceremony. "Olympic Medals" were given out to students. Bronze medals for participation went to all students. Silver medals were awarded to the partners who completed the most events, Gold medals went to the partners who were most accurate in computing the math for each event. The following is a list of the math station activities we set up and the materials needed at each station. **Continued...**

**1. Sponge Squeeze**

**Materials:** Six sponges, a bucket of water, six liquid measuring cups

**Activity Description:** Students squeezed water out of a sponge and measured the total volume of their squeezes in ounces after they estimated how much water they thought the sponge might contain.

**2. Javelin**

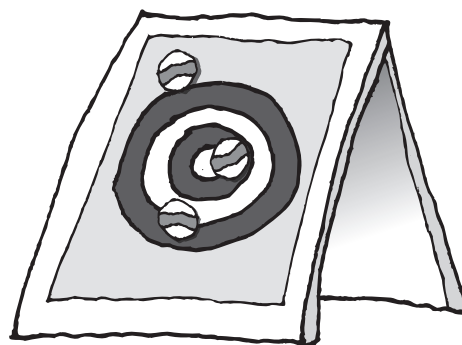
**Materials:** Inch rulers, six plastic drinking straws, masking tape.

**Activity Description:** Students estimated how far they thought they could throw a drinking straw. Then, they marked a spot on the floor with a piece of tape. They stood behind it to throw the drinking straw. They measured the distance thrown in inches.

**3. Bean Grab**

**Materials:** A bucket of pinto beans, food scales and balance scales with gram weights, portion cups

**Activity Description:** Students grabbed a handful of beans, estimated its weight in grams and then measured the actual weight using the balance or food scales available.

**4. Target Shoot**

**Materials:** Fuzzy fabric target, six ping pong balls with adhesive velcro strips

**Activity Description:** Students stood behind a line and took turns throwing balls at a target. They added up their total score depending on where the balls landed on the target.

**5. Jumping Jacks**

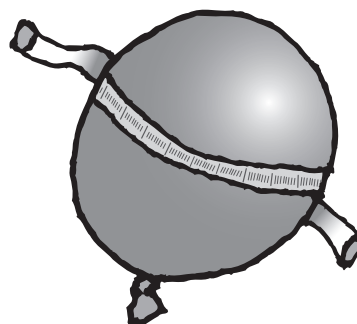
**Materials:** Six stop watches

**Activity Description:** Students estimated and then performed as many jumping jacks as they could in two minutes.

**6. Shot Put**

**Materials:** Cotton balls, six rulers, and masking tape

**Activity Description:** Students marked with tape where they stood and then threw a cotton ball. They measured the distance thrown in centimeters.



**7. Blow Out**

**Materials:** Balloons and measuring tapes

**Activity Description:** Students blew up a balloon, then measured the circumference after estimating how big around the balloon was.

**8. Foot Race**

**Materials:** Graphing paper and pencil

**Activity Description:** Students took off their shoe and traced around it on a sheet of graph paper. The younger partner estimated and counted the area. The older student calculated how much the area of both feet would be.

**9. Frog Jump**

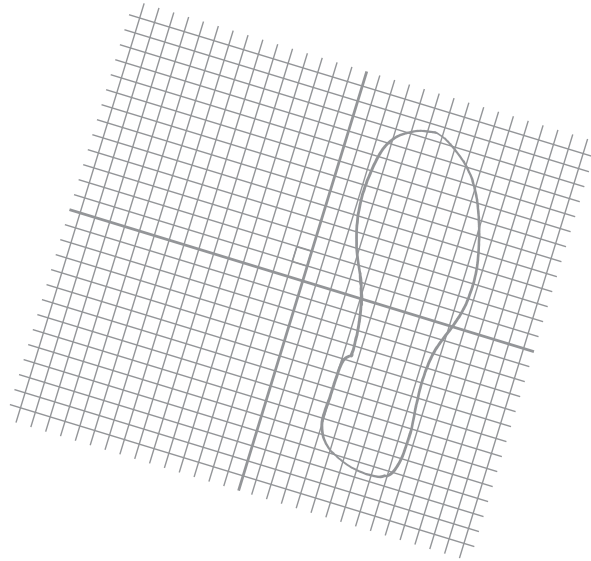
**Materials:** Adding machine tape and meter sticks

**Activity Description:** Students created a model that represented the distance they could hop, if they were able to hop like a frog.

**10. Standing Long Jump**

**Materials:** Yardsticks

**Activity Description:** Students stood behind a line to jump and then determined the length of their jump in inches, feet and yards. Before they jumped the younger student made an estimate of how far he or she thought he or she and his or her partner could jump.



Continued...

Name \_\_\_\_\_



## Math Station Contract: Buddy Olympics

Activity	Estimate	Actual Measure	Difference
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### Stations in Room One

1. <b>Sponge Squeeze</b> Students will squeeze water out of a sponge and measure total volume of their squeezes in ounces.			
2. <b>Javelin</b> Students will throw a drinking straw and measure distance thrown in inches.			
3. <b>Bean Grab</b> Students will grab a handful of beans and measure the weight in grams.			
4. <b>Target Shoot</b> Students will throw balls at a target and add up their total score.			
5. <b>Jumping Jacks</b> Students will do as many jumping jacks as they can in 2 minutes.			

### Stations in Room Two

6. <b>Shot Put</b> Students will throw a cotton ball and measure distance thrown in centimeters.			
7. <b>Blow Out</b> Students will blow up a balloon and measure the circumference.			
8. <b>Foot Race</b> Students will trace around their shoe on a grid sheet and count the area.	N/A		Sum of 2 feet
9. <b>Frog Jump</b> Students will create a model that represents the distance they could hop, if they hopped like a frog.			
10. <b>Standing Long-Jump</b> Students will stand behind a line to jump and determine the length of the jump in inches, feet and yards.			

