

"My leaf doesn't fit with the other leaves because it is green." - Rushil  
 What do you think we should do? - Mrs. Tesan  
 "I want to make a new pile." - Rushil

"I sorted the little sticks in their own pile because they were not the same as the other ones. The other ones are longer than these ones." - Sydney

"There is pine cones attached to this branch. It should have its own pile because it is different than the other branches." - Alexis B.

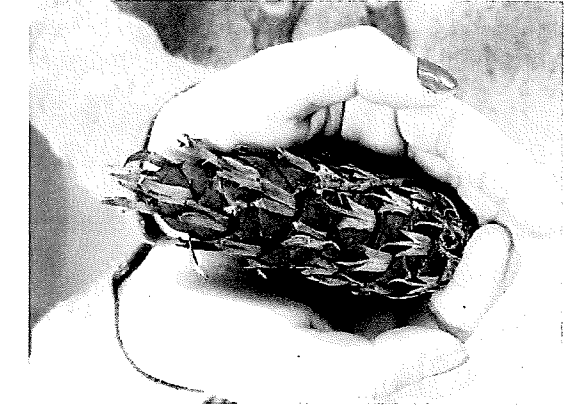
A few days later, we revisited our nature treasures and read the book Counting on Fall, by Lizanne Flatt. Each group of students (4-5 per group) received a sorted pile and were asked: What Math lives inside your nature treasures? As we looked closely at each sorted pile, ideas were shared and discussed, and then recorded when a teacher visited the group. We heard so many math connections: counting, shapes, lines, comparing sizes.



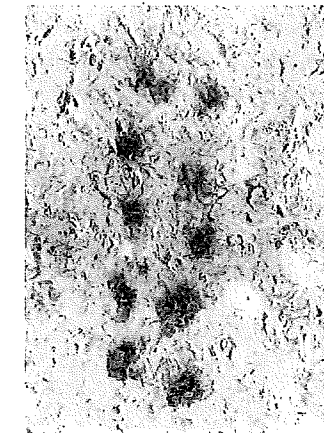
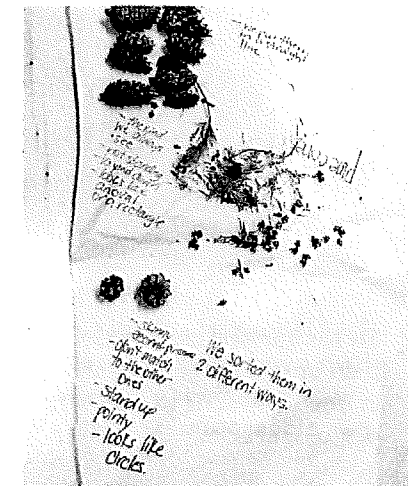
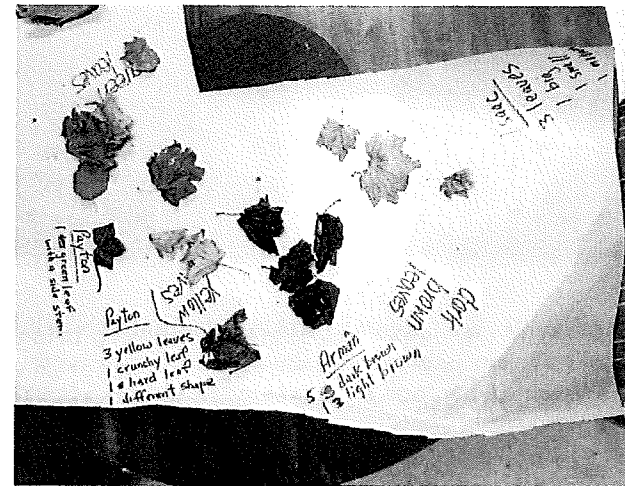
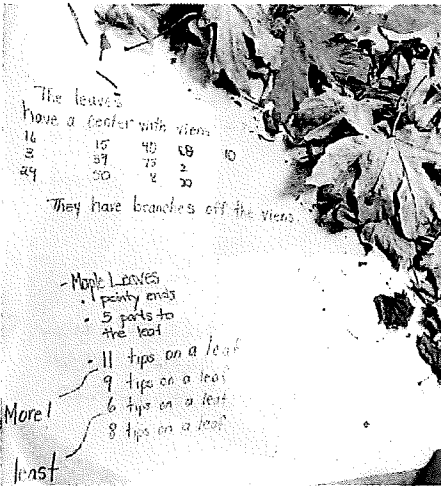
I found 30 veins on my green seed. Veins give you life. -Lucian



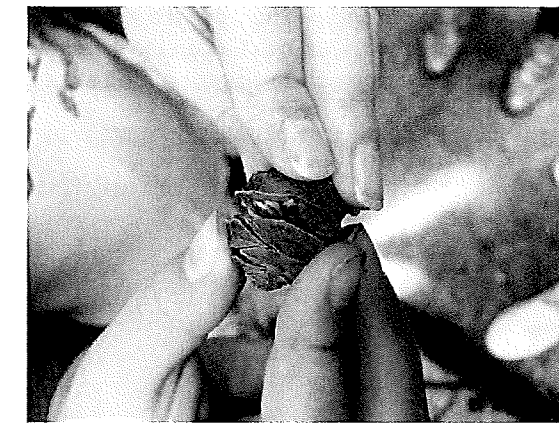
I found a green brown pattern in the leaf. -Naim



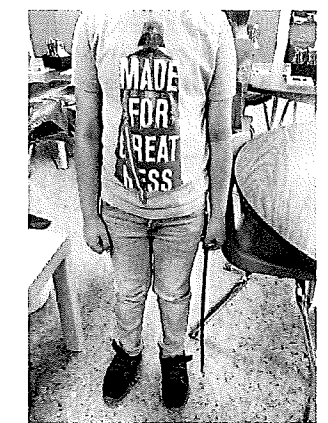
My pinecone has a black brown black brown pattern. -Raya



I made a 10 frame with 10 pieces of moss. - Veronica



I can count the seeds inside the green seedcase. I can count by 1's. There are 6 and 3+3=6. -Wyatt



I can measure how tall I am with a piece of Bamboo. I am 2 bamboo sticks tall. - Harvir

As teachers, we noticed that there was very little connecting to patterns in their discussions - creating patterns with their nature treasures as well as looking for patterns within their nature treasures. This is where we intend to head next with our collection.

In Grade 1 and 2, we began by collecting nature treasures from our mini forest at Annieville, and also continued to collected during our field trip to Redwood Park. We placed all of our treasures in a huge pile in the middle of our classroom. We wondered: What could we do with all of our treasures? Our pile looked like a campfire, so one of the students said "Have a camp fire!" That would be toasty, but before we did that, what else could we do with them?" The conversation quickly turned to math:



"We could count the sticks by 2's." - Raya  
 "We could build an animal shelter, make walls, add things to the house by counting them." - Jaiya  
 "We could sort everything into groups! Like sticks, leaves, moss, green seeds, pine needles. Then we could group them into 10 and count by 10's...like all the way to 100!" - Evan  
 "We could measure all the treasures! Put them in a huge line and see how many cm they make." -Flora

Then we decided to take just one treasure and really look closely at it. We spent some time on our own quietly looking. We came back together and shared the math that we found living in each of our treasures.



Our next step is to take our ideas and bring them to life. We are planning to build and measure, draw our patterns, and discover why is it important to understand why nature has patterns and the math that lives within it.

At Chalmers, the Kindergarten students went outside for a nature walk. The students noticed a variety of different items outside and wanted to pick them up. We decided as a class that we would each collect 1 nature treasure to bring back inside with us. We went back out for another nature walk and explored some new areas around our school grounds. This time, each student collected at least 5 nature treasures.

