G-TEAMS at Wakefield Middle School
Brenae Bailey and Arnulfo Velásquez

7th Grade Accelerated

Challenge Problems: Problems are posted in the classroom. Students work on them for 1-2 weeks, then we discuss the solutions as a class. Both of these examples generated lively discussions and tied into the textbook units on sequences and functions.

Dripping Water lab:
Students measured the volume of water leaking from a cup for one minute, taking data every five seconds. They then graphed the data and made predictions based on their analysis. We discussed relevant variables, averages of multiple trials, linear regression and rates of change.

Math Intervention

Hands-on activities: Students work on creative, math-related activities in small groups. Some examples are illustrated below.

Pascal’s Triangle
Can you fill in the next row?
1
1 1
1 2 1
1 3 3 1
1 4 6 4 1

Extend the triangle to at least 10 rows. How many number patterns can you find?

Handsakes
In the Greeting Room, every person shakes hands with every other person exactly once. If there are two people in the room, how many handshakes happen?
If there are three people, how many handshakes happen?
Four people?
Five people?
Find a pattern in the sequence.

Solids: Students worked with 3D objects to describe and classify prisms, pyramids, cylinders, cones, and general polyhedra. They then connected each object with its net. These explorations led into questions on how to calculate the volume and surface area of three-dimensional figures.

6th Grade

Unit on fractions: Activities included making fraction strips and finding examples of fractions in “real life”. Students recorded definitions, examples, calculations and reflections in their fraction booklets.

Number slides:
(Numbers will be changed; please change before use.)

1 1 1
1 2 1
1 3 3 1
1 4 6 4 1

Extend the triangle to at least 10 rows. How many number patterns can you find?

Students cut out and assembled number slides to help them explore the concept of place value. Using the number slides, we discovered the effect of multiplying and dividing decimals by powers of ten.

Number slides:

Solids:
Students worked with 3D objects to describe and classify prisms, pyramids, cylinders, cones, and general polyhedra. They then connected each object with its net. These explorations led into questions on how to calculate the volume and surface area of three-dimensional figures.