# Matter in a Mole

#### Summary

Students calculate and measure how many grams are in a mole, then measure one mole of that substance for display.

#### Time Frame

1 class periods of 70 minutes each

#### Group Size

Small Groups

## Materials

 <u>student sheet</u> (attached)
One baggie for per group
One sheet of butcher paper per group
One marker to mark baggie per group
Several harmless substances of your choice, suggestions include water, sugar, baking soda, salt, aluminum, copper pennies, nickel, zinc, lead, tin, etc.

#### **Background for Teachers**

Time Needed: 30 minutes the first day, 40 minutes the second

## Instructional Procedures

On the first day, hand out the student sheets and have students decide on what substances they will bring. If you would rather provide the substances, show students what their choices are. Try to have as many different substances as possible. You may wish to have students sign up for their substance and not allow any two students to do the same one. You may wish for students to work in groups of two to reduce the number of projects.

Have students do their initial calculations so that they have some idea how much of the substances to bring.

On the second day, give students time to mass their samples and work on their posters. Have the students present their work to the class individually or set it up as a "fair" that students can walk around and look at each others work.

## Bibliography

Lesson Design by Jordan School District Teachers and Staff.

## Authors

Utah LessonPlans