

Goals and Assessment

Clarify that the goals indicate what the students should be able to do as a result of the activity. Make sure that students understand that the **Chapter Challenge** is based on these goals.

Goal	Location in Activity	Assessment Opportunity
Explore the idea of atoms by trying to isolate a single atom.	Investigate Steps 1-2	Students can articulate how cutting the aluminum into smaller pieces is related to isolating a single atom.
Measure how many times greater mass a copper atom has than an aluminum atom.	Investigate Steps 3-12	Students obtain results that are close in value to those given in Teacher's Edition.
Practice careful laboratory technique with measuring masses and filtration.	Investigate Steps 3-11	Students display careful laboratory techniques.
Locate sources of the variation in the class's experimental results.	Investigate Steps 1-3	Students' discussion on variation in class results for ratio of aluminum to copper masses addresses issues listed in Teacher's Edition.
Compare Dalton's experimental results to the masses of atoms known today.	ChemTalk Chemistry to Go Questions 1-2	Students' answers match those given in Teacher's Edition.
See that atoms react in definite proportions of mass when forming a compound.	ChemTalk Chemistry to Go Questions 3-4	Students' answers match those given in Teacher's Edition.
Relate the mole concept to real quantities.	Inquiring Further	Students report research on the significance of Avogadro's number.
Use scientific notation in calculations.	Inquiring Further	Students' answers to dollar bill questions match those given in Teacher's Edition.