Balancing Act

Summary
Students will use wooden atoms to model and balance a chemical reaction.

Main Core Tie
Science - Chemistry
Standard 4 Objective 1

Time Frame
1 class periods of 90 minutes each

Group Size
Small Groups

Materials
- station equations
  (attached)
- student sheet
  (attached)
  wooden atomic model kits, enough for 10 stations, group sizes of 4,
  colored pencils (optional)

Instructional Procedures
Set up and count the number and kinds of atoms needed at each station. You can have
students figure out which atom is which color based on the ratios you provide or you can tell
them on a card.
Copy worksheets.
Reach the directions with students explaining anything about chemical reactions and balancing
equations that they might need additional reinforcement.
Divide students into groups and start them at different stations.
Move students from station to station as they finish.

Assessment Plan
ANSWER KEY:
Stations:
#1 -- __2__ H2 + ___ O2!_2__ H2O
#2 -- ___ N2 + _3__ H2!_2__ NH3
#3 -- __2__ KClO3 ! __2_ KCl + _3__ O2
#4 -- ____ CH4 + _2__ O2!___ CO2 + _2__ H2O
#5 -- ___ PbCl2 + ___ Na2S!___ PbS + _2__ NaCl
#6 -- __6_ Li + ___ N2 ! __2_ Li3N
#7 -- _4__Na + ___ O2 !__2_ Na2O
#8 -- _4__ H2 + _2 Cl2!_2__ HCl
#9 -- _2NaCl + _2 F2 ! _2 NaF + _2Cl2
#10 -- _4__ P + _5_ O2 !_2_ P2O5
Bibliography
Lesson Design by Jordan School District Teachers and Staff.

Authors
Utah LessonPlans