

Student directions Balancing Chemical Equations activity

Learning Goals: Students will be able to

- Describe what “reactants” and “products” in a chemical equation mean.
- Explain the importance of knowing the difference between “coefficients” and “subscripts”.
- Use pictures and calculations to show how the number of atoms for each product or reactant is found.
- Identify the relationship between “reactants” and “products” atoms.
- Balance a chemical equation using the relationships identified.
- Given a chemical equation, draw molecular representations of the reaction and explain how the representations were derived.
- Given a molecular drawing of a chemical reaction, write the equation and explain how the symbols were derived.

Directions:

1. How does the sim provide information to help you learn the goals?
2. What things did you have to research outside the sim (cite references)?
3. How can you use the sim to check your learning?
4. Use this balanced reaction to show that you can write the equation that makes chemical sense. Explain how the symbols were derived in paragraph form.



5. Use this reaction to show that you can draw molecular representations of a balanced reaction. Explain how the representations were derived in paragraph form.

