Computer simulations, animations, and guided inquiry tutorials for general chemistry: The Next Generation Project

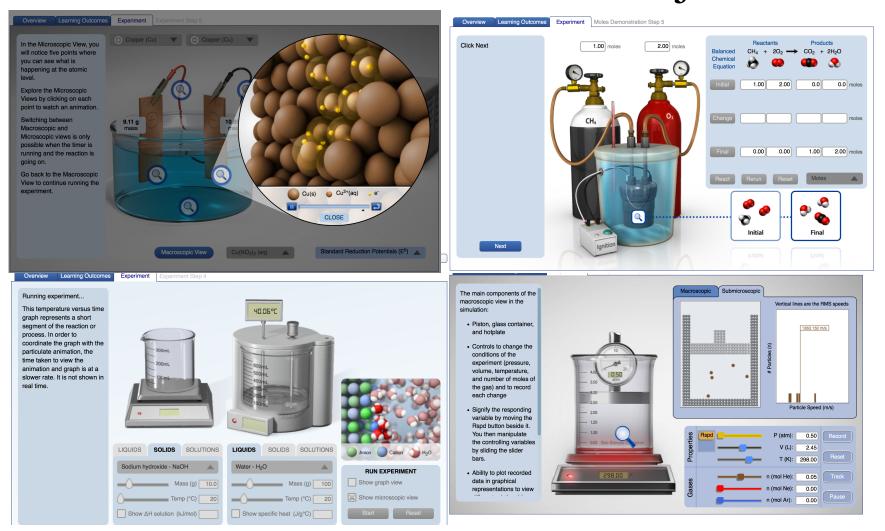
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http://intro.chem.okstate.edu/Nextgen/NextGen.html http://genchem1.chem.okstate.edu/BDA/Topics.php (Teachers only)

Next Generation Project



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The Learning Cycle & Class Instruction

Learning Cycle	Role	Activity	Class Organization
Exploration	Introduction to Concept	Data Collection & Analysis	BCE - Before Class Exploration
Concept Invention	Identify Concept	Conclusions and interpretations	DCI - During Class Invention
Concept Application	Apply, Extend Reinforce, or Modify Concept	Using the concept in new applications	ACA - After Class Application

BCE – Before class exploration

- Online activity completed by students prior to class;
- 10 to 15 minutes to complete;
- Can be used to-
 - Pool data to invent concepts,
 - Identify student misconceptions,
 - Review concepts for a new topics
- Instructor can use data to organize content of class

DCI – During Class Invention

- Cooperative group activities;
- •Share BCE responses and guided questions;
- Students/instructors invent concept;
- •Student respond to clicker questions;
- Apply and extend concept;

ACA – After Class Application

- •Online web-based activity;
- •Assessing what students take away from BCE and DCI;
- Apply and Extend the concept;
- •Technology: simulations, animations;
- •Response submitted online;
- •Instructor has access to all responses

Review Web site

• <u>http://intro.chem.okstate.edu/Nextgen/NextGen.html</u>

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