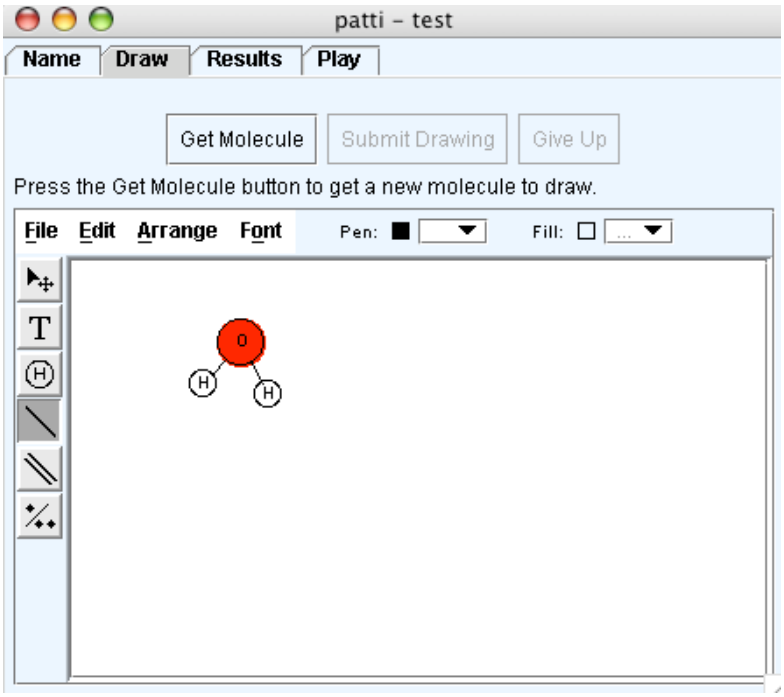
TUPLE SPACES Project - Draw My Molecule Activity

Students gain familiarity with chemistry representations

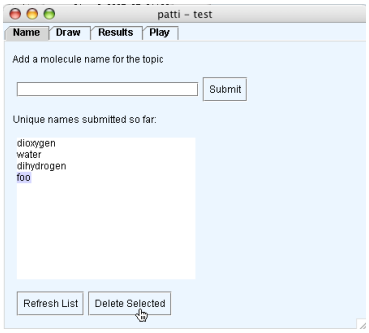
Draw My Molecule

This tool provides an interactive environment to help students become familiar with multiple representations for various molecules. Using the tool, students first submit (*write*) names of molecules to the space. Once several molecule names have been generated, students grab (*take*) a random molecule name from the space and draw it in one of three chemical representations: molecular formula, electron dot, or ball and stick using the ChemSense drawing tool (http://chemsense.org). They then submit (*write*) their representation back to the space. If a student is unable to generate the representation, she can release (*write*) the molecule back to the space and take a different molecule and representation assignment. As this distributed drawing activity progresses, the matrix of molecule-representation types becomes more complete. In a final activity, students use the tool to play a "slot machine" game in which they get (*read*) three random representations and indicate, through checkboxes, which (if any) represent the same molecule. If they indicate correctly, they win that round. Wins and losses are tallied for both individual and group scores.

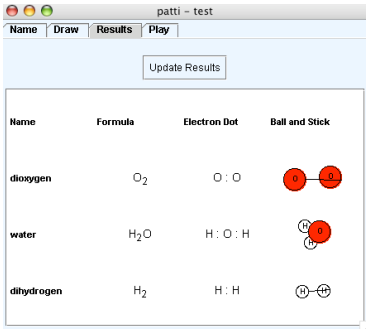
Tuples: MoleculeActivityTuple, MoleculeTuple, EquivMoleculeTuple



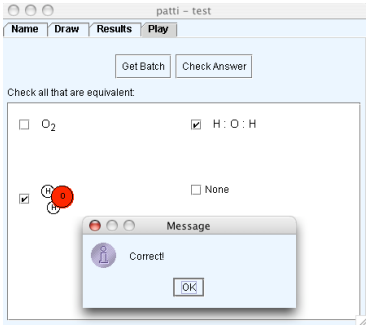
Drawing and submitting molecules representations to the classroom space.



Submitting molecule names to the shared space.



Completing the matrix of molecule representations.



Playing a slot-machine game.