

PhET Simulation: Molecule Polarity

Directions:

- Go to the following website: <https://phet.colorado.edu>
- Click the word SIMULATIONS at the top of the screen and choose chemistry from the drop down menu.
- Find the simulator called Molecule Polarity and click it to open it.
- Click the play button.

Or go directly to this address in your browser:

<https://phet.colorado.edu/en/simulations/molecule-polarity>

First, click on the box above the words "Three Atoms".

Experiment with the simulator. Try out the controls, click and drag things to move them around, click buttons and try to get an idea of how the simulator works. When you finish, push the reset button  and then answer the questions below.

1) Which atom has the highest electronegativity?

Click the check boxes for bond dipoles and partial charges



2) Why do you think that the molecule dipole arrow  points upward? Consider the bond dipoles.

3) Is the molecule polar? Explain. [Consider the partial charges of each atom]

Phet Molecule Polarity Guided Inquiry Answer Key

R Barnett



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