

Student directions *Under Pressure*:

<http://phet.colorado.edu>

Learning Goals: Students will be able to qualitatively:

1. Investigate how pressure changes in air and water.
2. Discover how you can change pressure.
3. Predict pressure in a variety of situations

Directions:

1. Explore the simulation to find out how pressure changes in air and water.
2. Describe your findings and include specific data from your explorations to support your ideas.
3. Test your ideas by predicting what the air pressure would be 2 meters above sea level and 2 meters under water.
 - a. Use the sim to check and then make corrections to your ideas if necessary.
 - b. How would your values compare if the pool of water was in Denver (The “Mile High” city)?
 - c. How does the shape of the pool affect your values?
4. Discover how you can change pressure in the simulation.
 - a. Describe your findings and include specific examples.
 - b. Check to see how your answers to #3 change as you change the things that affect pressure. Describe qualitatively
 - c. Are there things that could affect pressure that were not included in the sim? Cite references for your ideas.
5. Prepare for clicker questions that will give specific situations by testing a variety of situations.