Under Pressure

Turn in one copy of this lab with each group member's printed name and signature. By signing, you certify that you have actively participated in the exercise and have put forth effort in equal share to your fellow group members.

Printed Name	Signature
_____	_____
_____	_____
_____	_____
_____	_____

Time	Temperature	Pressure

Questions

1. What is the observed relationship between temperature and pressure in this experiment?

2. If the Erlenmeyer flask were replaced with a balloon, what would happen to the balloon as the experiment progressed? Use the words **collision** and **kinetic energy** in your answer.

3. In the last step, we calculated T_Z, absolute zero. Using the equation in Step 3, find the pressure when $T = T_Z$.

4. Given your answer to questions 2 and 3, what is the kinetic energy (and therefore the velocity) of gas particles at absolute zero? Why do we call this *absolute* zero?