**Honors Chemistry Quiz – KMT and Gas Laws Makeup**

1. What are the four postulates of the kinetic molecular theory (i.e. the principles which describe the basic properties of an ideal gas?) (8 pt)
2. Which of the underlying assumptions about the behavior of gas molecules (I’ve been referring to these as “postulates”) of the KMT do you believe is most accurate? Explain your answer. (4 pt)
3. I’ve got a gas that has a pressure of 4920 atm and a temperature of 400oC. If I were to heat this gas by 600o C, what would the new pressure of this gas be? (4 pt)
4. A baby piglet has a lung volume of about 65 mL and a normal body temperature of 42 degrees Celsius, and a lung pressure of 1.02 atm. Given that R = 0.08206 Latm/mol K, what is the number of moles of air inside the pig’s lungs? (5 pt)
5. Why do we say that ideal gases typically experience no intermolecular forces? (4 pt)

Time in: \_\_\_\_\_\_\_\_\_\_\_\_

Time out: \_\_\_\_\_\_\_\_\_\_\_\_

MATH --- SCIENCE

Student name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Teacher: Mr. Guch

Date to be completed: End of quarter Time Allowed: No time limit

Additional Materials Allowed:

* Graphing/four function calculator (student responsible for providing).
* Periodic table will be attached to this sheet by me if needed
* No other materials may be used on this quiz