**KMT Quiz: General Chem**

1) There’s a guy on my street who came back from a fishing trip and I could smell the sturgeon on his clothing from all the way across the street. Is the movement of the gaseous sturgeon molecules across the street an example of effusion or diffusion? Explain, making sure to define both terms. (6 pt)

2) I have measured the energy of the molecules of two different gases, helium and UF6, both at a temperature of 425 K. Given your knowledge of the kinetic molecular theory, which molecule has more energy? Explain your answer. (4 pt)

3) If I put a gas into a cylinder and push on it, I find that very little energy is needed to decrease the volume of the gas by 50% of its original volume. Explain why it takes so little energy to compress this gas. (5 pt)

4) If I continue pushing on this gas in the cylinder, I find that the amount of effort required to continue compressing the gas from 10% to 5% of the original volume is far greater. *Explain* why this is. (5 pt)