

Name _____ period ____ date _____

Graham's Law Problems

1. If equal amount of helium and neon are placed in a porous container and allowed to escape, which gas would escape faster and how much faster?
2. How much slower would a sample of sulfur dioxide gas effuse than a sample of hydrogen gas?
3. A certain gas effuses 4 times as fast as oxygen gas. What is the molar mass of the unknown gas?
4. A compound effuses through a porous cylinder 3.20 times faster than helium. What is its molar mass?
5. a) Under the same conditions of temperature and pressure, how many times faster will hydrogen effuse compared to carbon dioxide?

b) If it takes the carbon dioxide 32 seconds to effuse, how long will the hydrogen take?

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