

Concentration, Pressure and Reaction Rates

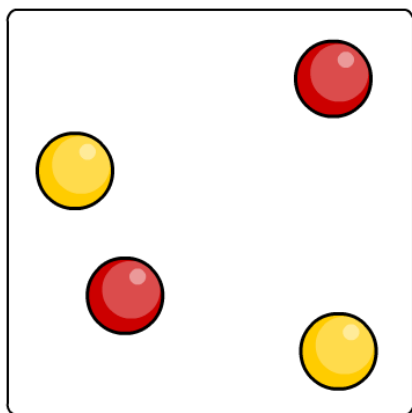


Effect of concentration on rate of reaction

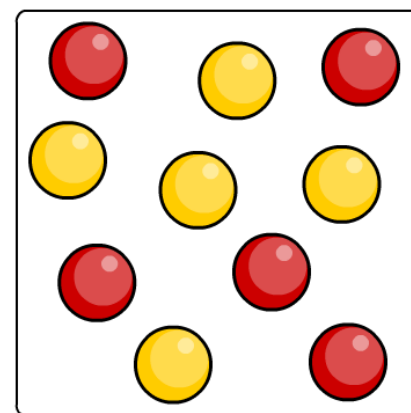
The higher the concentration of a dissolved reactant, the faster the rate of a reaction.

Why does increased concentration increase the rate of reaction?

At a higher concentration, there are more particles in the same amount of space. This means that the particles are more likely to collide, and therefore more likely to react.



lower concentration



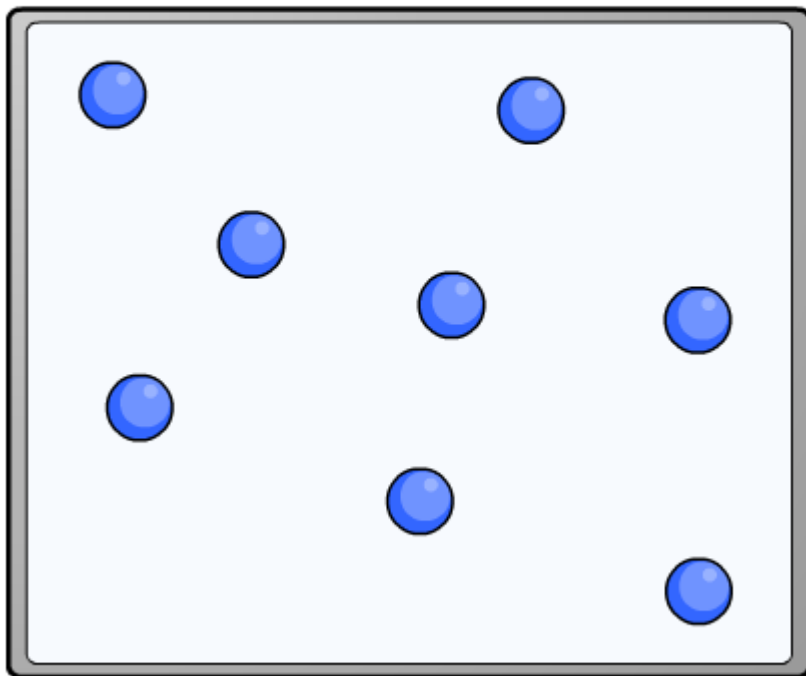
higher concentration

How does concentration affect particle collisions?

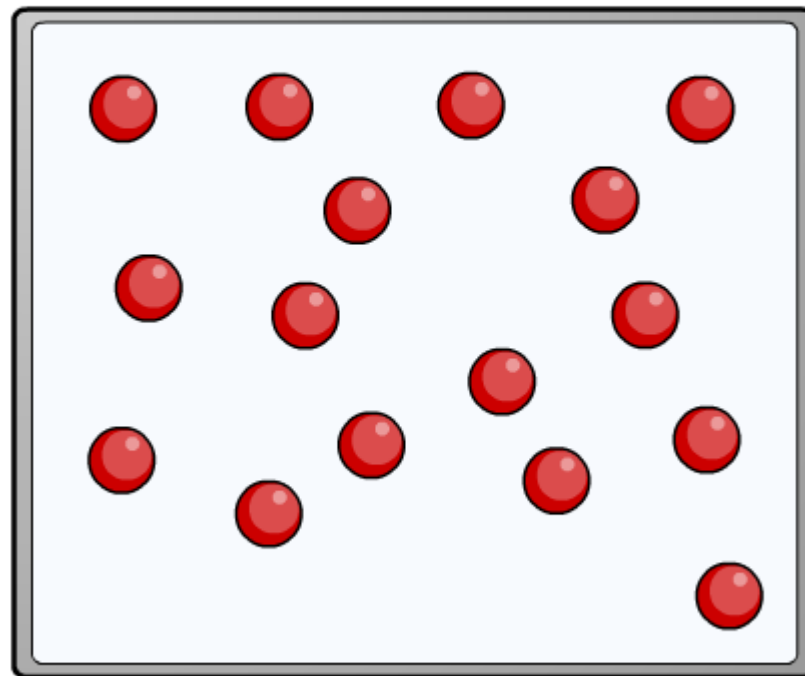
0

15

0



low concentration

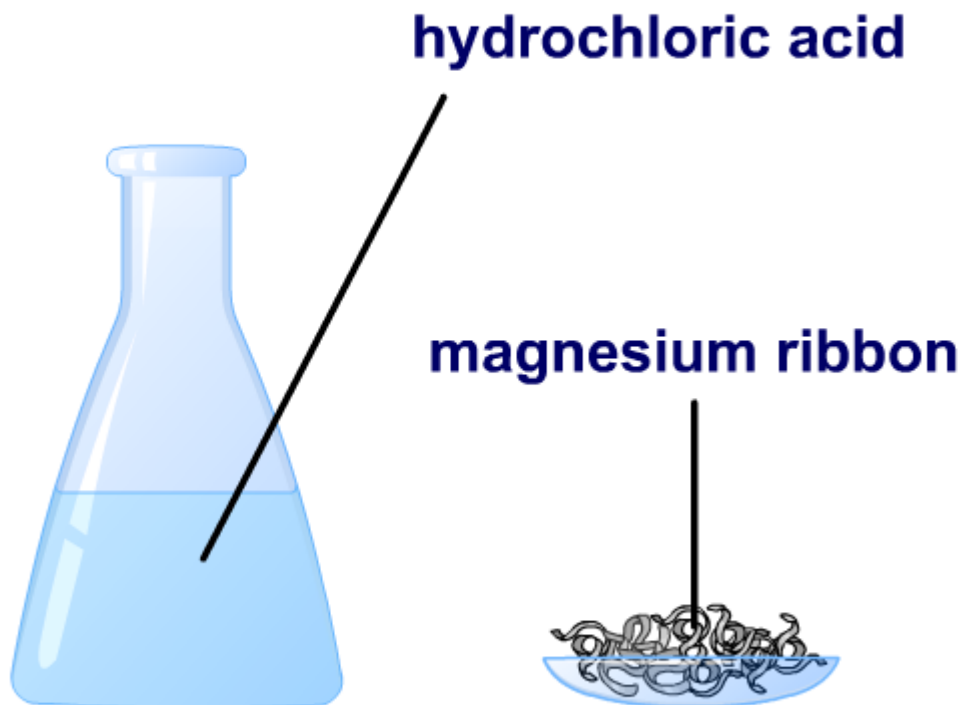


high concentration





How does concentration affect rate of reaction?



The reaction between magnesium and hydrochloric acid can be used to investigate the effect of concentration on rate of reaction. Click "**start**" to find out how.



start

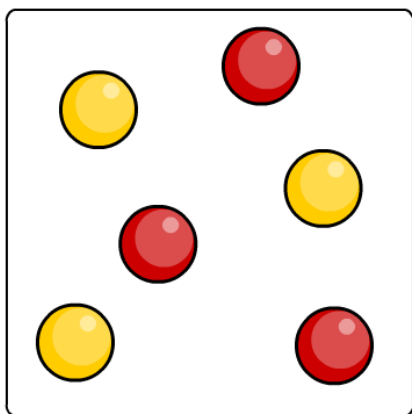


Effect of pressure on rate of reaction

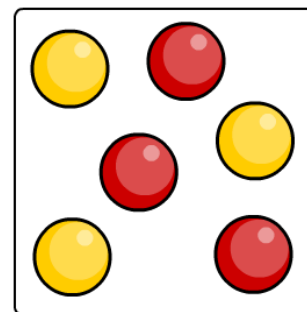
Why does increasing the pressure of gaseous reactants increase the rate of reaction?

As the pressure increases, the space in which the gas particles are moving becomes smaller.

The gas particles become closer together, increasing the frequency of collisions. This means that the particles are more likely to react.



lower pressure



higher pressure