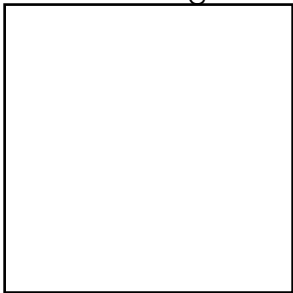
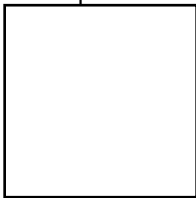


Change reactant concentration	<p>↑ [Product] shifts eq.</p> <p>to use up the extra product.</p>	↑ [Product]	Change product concentration
	<p>↓ [Reactant]</p>	<p>↓ [Reactant] shifts eq.</p> <p>to make more of the missing reactant</p>	
	<p>Since heat is a product, increasing the temperature would be similar to increasing a product [], so eq. would shift</p> <p>to use up the extra product</p>	↑ Temperature	
	<p>↓ Temperature</p>	<p>Since heat is a reactant, decreasing the temperature would be similar to decreasing a reactant [], so eq. would shift</p> <p>to make up for the missing reactant</p>	
<p>Changes to pressure</p> <p>(only affects gases)</p>	<p>If we increase the volume, the molecules are now too far apart. The equilibrium would then shift to the side of the reaction with _____ moles of a gas so the molecules are closer together.</p> 	<p>↓ Pressure</p> <p>(↑ Volume)</p>	<p>Let's say this container contains a gas and all of the molecules are perfectly spaced apart.</p> 

Le Chatalier's Principle

How stress affects
equilibrium

*Remember, a catalyst
does not shift
equilibrium. A catalyst
simply helps a system
reach equilibrium
sooner.

↑ [reactant] shifts eq.

to use up the extra
reactant.

Since heat is a reactant,
increasing the
temperature would be
similar to increasing a
reactant [], so eq. would
shift

to use up the extra
reactant

↓ [Product] shifts eq.

to make more of the
missing product

Since heat is a product,
decreasing the
temperature would be
similar to decreasing a
product [], so eq. would
shift

to make up for the
missing product

↑ [Reactant]

↓ [Product]

↑ Temperature

↓ Temperature

