Reactions and Rates 4 Also uses Salts & Solubility and States of Matter Clicker Questions

LeChatlier's Principle

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Learning Goals

Students will be able to:

- Explain how to make equilibrium systems change and predict what changes will happen.
- Compare and contrast saltsolution, phase, and chemical equilibriums.

If you add water to this salt solution, what will happen?

$$NaCl(s) \Rightarrow Na^+_{(aq)} + Cl^-_{(aq)}$$

- A. The system will shift to the right
- B. The system will shift to the left
- C. LeChatlier's principle doesn't apply to physical systems



If you increased the air pressure above this salt solution, what will happen?

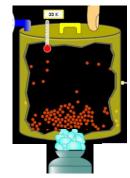
$$NaCl(s) \Rightarrow Na^+_{(aq)} + Cl^-_{(aq)}$$

- A. The system will shift to the right
- B. The system will shift to the left
- C. This system would not be effected by pressure changes.



If you cooled the container, what will happen? $Ne_{(I)} \rightleftharpoons Ne_{(g)}$

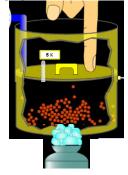
- A. The system will shift to the right
- B. The system will shift to the left
- C. This system is not effected by temperature



If you made the container smaller, while keeping the temperature constant, what will happen?

$$Ne_{(I)} \rightleftharpoons Ne_{(g)}$$

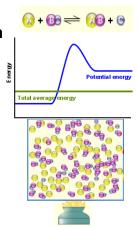
- A. The system will shift to the right
- B. The system will shift to the left
- C. This system would not effected



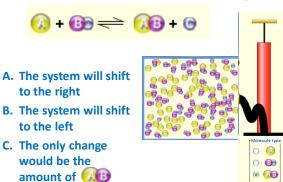
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What would happen if you added energy using the heater?

- A. The system will shift to the right
- B. The system will shift to the left
- C. Both reactants and products would have more energy, but the amounts would not change much



What would happen if you added @ ?



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