Equilibrium Simulation

1. Open your ziplock Bag and remove 4 gray circles and 8 white circles. Label the gray circles N and the white circle H
2. Using your models, make 2 molecules of N_2 and 2 molecules of H_2. Draw particle diagrams to represent your models in the boxes below.
3. Use your N_2 and your H_2 molecules to make as many NH_3 molecules (your product) as you can. Draw a particle diagram below to represent the NH_3 molecule(s) below.

N_2	H_2

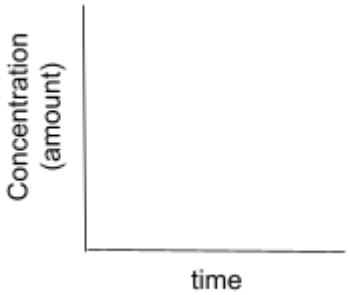
NH_3

4. How many molecules of NH_3 were you able to build?

5. How did the amount (concentration) of the N_2 and H_2 change when you made the ammonia (NH_3)?

6. Now let's reverse the reaction. Take the NH_3 molecules that you just created and make as much N_2 and H_2 as you can. How did the amount (concentration) of the ammonia (NH_3) change when you made the N_2 and H_2 ?

7. Construct a graph of the reaction as it approaches equilibrium based on your observation. Include one line reactants and one for products.



8. Make a prediction: How would increasing the amount (concentration) of N_2 and H_2 affect the amount of ammonia (NH_3) that could be produced?

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9. Make a prediction: How would increasing the amount (concentration) of ammonia (NH_3) affect the amount of N_2 and H_2 that could be produced?