Le Chatelier's Principle Graphing Review Practice Worksheet

1. On the graph, illustrate how the concentration of each substance changes when the equilibrium is disturbed by a **temperature increase** at the 2-minute mark, and show what the system looks like after 4 minutes once a new equilibrium has been established.

$$N_2O_4$$
 (g) + heat \Rightarrow 2 NO_2 (g)

3.0

[N₂O₄]

2.0

[NO₂]

0.0

1 2 3 4 5 6

Time (min)

2. On the graph, illustrate how the concentration of each substance changes when the equilibrium is disturbed by an **increase in pressure** at the 2-minute mark, and show what the system looks like after 4 minutes once a new equilibrium has been established.

$$N_2O_4$$
 (g) + heat \Rightarrow 2 NO_2 (g)

3.0

[N₂O₄]

2.0

[NO₂]

0.0

0

1

2

3

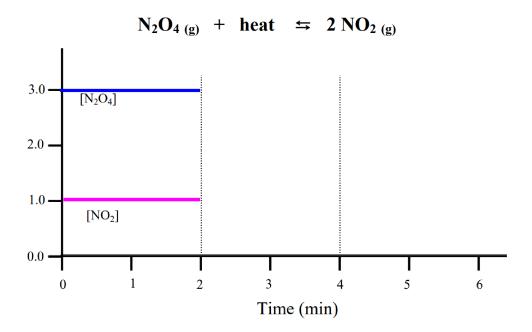
4

5

6

Time (min)

3. On the graph, illustrate how the concentration of each substance changes when **NO**₂(**g**) is added at the 2-minute mark, and show what the system looks like after 4 minutes once a new equilibrium has been established.



4. On the graph, illustrate how the concentration of each substance changes when **some** NO₂(g) is removed at the 2-minute mark, and show what the system looks like after 4 minutes once a new equilibrium has been established.

