Check-Out Questions: Answer the following questions in your lab notebook.
Chemists must be able to measure and control the rate of a chemical reaction in order to produce substances in a safe and economical way. Chemists can slow down a reaction rate by lowering the temperature of the reaction or by diluting the concentration of the reactants.

1. Describe the concept of a reaction rate.

2. Describe the molecular-kinetic theory of matter.

3. Use what you know about reaction rates and collision theory of matter to explain why lowering the temperature of a reaction or diluting the concentration of the reactants in a reaction will decrease the rate of a chemical reaction.

4. Scientists use experiments to prove ideas right or wrong. Do you agree or disagree with this statement? Explain your answer, using an example from your investigation about reaction rates.

5. Scientists need to be creative and have a good imagination to excel in science. Do you agree or disagree with this statement? Explain your answer, using an example from your investigation about reaction rates. Explain your answer, using an example from your investigation about reaction rates.

6. An important goal in science is to develop causal explanations for observations. Explain what a casual explanation is and why these explanations are important, using an example from your investigation about reaction rates.

7. Scientists often use or develop new models to help them understand natural phenomena. Explain what a model is in science and why models are important, using an example from your investigation about reaction rates.