

**Science 9****Unit B: Matter and Chemical Change****Lesson 14****Practice Worksheet 29: How Does the Concentration of the Reactants Affect Reaction Rate?**

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Watch the video "[Decomposition of Hydrogen Peroxide and the Effect of Varying Concentration](#)".

As you watch the video, complete the following questions.

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**Question 1**

Complete the data table below, based on the experiment in the video.

Concentration of Hydrogen Peroxide Solution	Initial Temperature (°C)	Final Temperature (°C)	Change in Temperature (°C)	Approximate Height of Bubbling (cm)

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**Question 2**

How did yeast affect the rate of the decomposition of hydrogen peroxide?

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**Question 3**

Write a chemical word equation to describe the decomposition of hydrogen peroxide into oxygen gas and water.

**Question 4**

Write the chemical formula for hydrogen peroxide.

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**Question 5**

If you were to repeat this experiment using 1% hydrogen peroxide instead of 3% hydrogen peroxide, what do you think would happen to the rate of reaction? Explain your answer.

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**Question 6**

Is this reaction exothermic or endothermic? Explain your answer.

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**Question 7**

As concentration of the reactants decreases, what happens to the rate of reaction?

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**Congratulations! You have completed this practice worksheet.**

Now it's time to carefully compare your answers to the suggested answers in the online course. When comparing, you should feel free to make changes to your answers or make extra notes.

**Keep this practice worksheet for study purposes.** Using practice worksheets as a study tool to review for exams is a great idea.

**If you unsure about any of the questions or answers, or you just want more feedback, share this practice worksheet with your teacher and ask for assistance.** You can do that by emailing the teacher, or by submitting it in the Course Questions Forum in the online course. If you are using this practice worksheet in Google Drive, don't forget to change the sharing settings so that anyone can view it before sending the link to your teacher.

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