## **Core Skills Analysis**

## Chemistry

- Understanding the combustion process when creating homemade fire lighters.
- Learning about the properties of different materials that can aid in igniting fires.
- Exploring the chemical reactions involved in fire starting.
- Applying principles of heat transfer and energy conversion in the context of fire lighting.

## Tips

For further development after the Homemade fire lighters activity, students can experiment with varying ratios of the materials used to observe how it affects the efficiency of the fire lighters. They could also research and test different binding agents to enhance the burning characteristics. Additionally, exploring the impact of environmental factors like humidity and temperature on the ignition process can deepen their understanding of fire starting.

## **Book Recommendations**

- <u>The Ultimate Bushcraft Survival Manual</u> by Tim MacWelch: A comprehensive guide to wilderness survival skills, including fire starting techniques using natural materials.
- <u>Chemistry: The Central Science</u> by Theodore L. Brown, H. Eugene LeMay, Bruce E. Bursten: Provides an in-depth look at the fundamental principles of chemistry, perfect for understanding combustion reactions.
- <u>The Fire Starter Sessions</u> by Danielle LaPorte: Not directly related to fire lighters, this book offers insights on igniting passion and creativity in various aspects of life.