

## Core Skills Analysis

### Science

- Learned about the principles of aerodynamics through the documentary, understanding how shape and design impact flight.
- Experimented with different folding techniques to observe how they affect the planes' performance, gaining hands-on knowledge of lift and drag.
- Explored the concept of center of gravity by adjusting weights on the paper planes to achieve optimal balance for better flight.
- Understood the impact of air resistance on the paper planes' flight path by observing how different factors such as angle and speed affect their trajectory.

### Tips

To further develop their understanding of aerodynamics and flight, students can explore designing paper planes with varying wing sizes and shapes to see how they affect lift. Additionally, they can conduct experiments by adding materials like paper clips or tape to different parts of the plane to observe changes in stability and flight distance. Encouraging them to investigate the effects of weather conditions, such as wind speed, on their planes' flight can provide valuable insights into real-world aerodynamic challenges.

### Book Recommendations

- [The World Record Paper Airplane Book](#) by Jeff Lammers: This book offers designs and techniques for creating high-performance paper airplanes, including explanations of aerodynamics principles in a fun and engaging way.
- [Amazing Paper Planes: New Frontiers in Folding](#) by David Mitchell: Explore innovative paper plane designs and folding techniques that challenge traditional concepts, inspiring creativity and experimentation.
- [Flight: The Complete History](#) by R.G. Grant: Discover the fascinating history of flight, from paper planes to modern aircraft, with insights into the evolution of aerodynamics and aviation technology.