# **Core Skills Analysis**

## **Science**

- The student learned about concepts of lift and drag as they experimented with different folding techniques to create airplanes that flew differently.
- They gained an understanding of gravity as they observed how the weight distribution of the paper airplane affected its flight pattern.
- They explored the principles of aerodynamics by noticing how changing the shape and size of the paper airplane wings impacted its speed and stability.
- The student also learned about air resistance when they observed how the folded paper plane moved through the air.

#### Math

- The student practiced measurement skills by folding paper to specific dimensions to create different airplane designs.
- They engaged in counting and comparison activities while trying out various folding methods to see which one produced the best flying result.
- They learned about angles and geometry as they experimented with different paper folding angles to see how it affected flight trajectory.
- The student also explored the concept of symmetry while folding the paper airplane to ensure balance and stability.

# **Tips**

Engaging in hands-on activities like making paper airplanes can be a fantastic way to introduce young learners to basic scientific and mathematical concepts. To further enhance this learning experience, consider incorporating discussions on different types of airplanes, the history of flight, or even organizing a mini paper airplane flying competition to encourage creativity and friendly competition among students.

### **Book Recommendations**

- <u>Paper Airplanes Mega Pack</u> by Andrew Dewar: This book features easy-to-follow instructions for creating a variety of paper airplane models suitable for children. It encourages creativity and experimentation while teaching basic principles of flight.
- <u>The Kids' Guide to Paper Airplanes</u> by Joni Morton: Filled with colorful illustrations and step-bystep folding guides, this book is a great resource for young learners interested in making and understanding the science behind paper airplanes.
- <u>Folded Fun: Beginner Origami Airplanes</u> by Chris Alexander: A beginner-friendly book that combines the art of origami with the fun of creating paper airplanes. It introduces simple folds and designs suited for young children.