The Adventure:
Paper airplanes come in all shapes and sizes. Some paper airplanes fly very straight, while others curve or do loop-the-loops. And, like real planes, some can carry more cargo than others. Put your design skills to the test to build the paper airplane of your dreams.

Do:
• Design, fold and test your paper airplane.
• Test how far your airplane can fly, and how straight it flies.
• Next, test how much cargo your plane can carry over a set distance.

Plan:
• What do you know about the parts of an airplane?
• How does an airplane work?
• What do you know about building paper airplanes?
• What do you want your paper airplane to do? Do you want your plane to fly straight or do tricks? Fly the farthest or carry the most cargo?
• How will you know which plane flew the farthest?
• How will you measure which plane could carry the most cargo?
• What design will you create and build?

Review:
• What do you know now that you did not know before?
• Which planes flew the farthest? Why?
• What made a plane fly straight? What made a plane curve to the left or right?
• Which planes could carry the most cargo? What made one plane stronger than another?
• What elements of STEM were in this adventure? Science? Technology? Engineering? Mathematics?
• What did you like about this adventure? What did you not like? What would you do differently?
PAPER AIRPLANE CHALLENGE

MATERIALS:
• Paper – different types and sizes
• Scissors
• Tape
• Coins

SAFETY TIP:
• What safety concerns will you need to consider as you make the paper airplanes?
• How will you work with other Cubs to have a fun and safe time?

ONLINE RESOURCES:
• STEM Paper Airplane Challenge
• Paper Airplane Designs
• How do Airplanes Fly?