



Composite Airplane Activity

AUTHOR

STEM Pre-Academy

GRADE LEVEL

K-12

CONTENT TOPICS

Math
Science
EDP

DESCRIPTION

An Engineering Design activity based on constructing and testing folded airplanes made from combined common household materials to model composite materials. A high-level adaptation of the plain paper airplane. The activity covers a review of the Engineering Design Process (EDP) with a focus on project planning (Gantt chart) and the engineering notebook documents student work of the engineering design process and addresses all 8 of the NGSS Science and Engineering Practices (SEP). The Build an Airplane EDP activity was adapted from the Composites Curriculum developed the Boeing/Teaching Channel Partnership.

Instructional materials include teacher presentation, student pre-session materials, and student engineering notebook.

This activity was used at a teacher training session (Gr K-8) on 3/27/2021.

SUGGESTED STANDARDS CONNECTIONS

NGSS	ETS1-1
	ETS1-2
	ETS1-3
	ETS1-4
	5-PS1-3
	5-PS1-4