

Reaching New Heights

* The following lessons are designed for grades 6-8

Lesson Title	Pg	Grade Level	Academic Standards	Activity Description
Rippin' Rockets	6	7	3.2.7 B	Build and test a straw rocket
		7	3.4.7 C	Learn and control pitch, roll and yaw
Fly'n show	8	8	1.6.8 C	Exhibit a rocket and present it to judges
Let's go launching!	10	8	1.6.8 C	Demonstrate a rocket launch
		7	3.1.7 A	Know how a rocket goes together
Attitudes, Altitudes & Airspeeds	12	8	13.2.8 G	Practice looking at flight instruments as a pilot would
Rudder away	16	7	3.1.7 B	Model the Wright flyer
		7	3.2.7 B	Build and test a straw glider with other students
		7	3.4.7 C	Learn forces related to wings and flight
Flying my way	18	7	3.1.7 A	Learn about parts of wings and how they work
		7	3.2.7 B	Make and test paper gliders
		7	3.4.7 C	Learn about the forces that act on wings
Star gazing	20	8	1.6.8 D	Discuss observations of a model night sky
		7	3.1.7 B; 3.2.7 B	Make a model of the night sky and observe
		7	3.4.7 D	Illustrate how constellations move across the sky
Powerful payload	22	7	3.1.7 B; 3.2.7 B	Build a model of a rocket and test payload effects
		7	3.4.7 B	Learn about forces acting on payload
		8	1.6.8 D	Teach this activity to someone
Flying fighters	24	7	3.2.7 B	Build and test a fighter kite
		7	3.4.7 B	Try to control forces acting on a kite
Mustangs to zeros	28	7	3.1.7 A	Know parts of a model airplane
Copters and robbers	30	7	3.1.7 A	Know parts of a helicopter
Just blowing through	32	7	3.1.7 B; 3.2.7 B	Model a hang-glider and test with different wind conditions
		7	3.4.7 B & C	Learn about thermals

Academic Standards for Reading, Writing, Speaking and Listening met:

Speaking & Listening: 1.6.8 C D

Academic Standards for Science and Technology met:

Unifying Themes of Science: 3.1.7 A B

Computation & Estimation: 3.2.7 A B

Physical Science, Chemistry & Physics: 3.4.7 B C D

Proposed Academic Standards for Career Education and Work met:

Career Acquisition (Getting a Job): 13.2.8 G