

A is For Aeronautics: STEM Programming with NASA

Diana Price, Alexandria Library

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WITH YOU WHEN YOU FLY:

Aeronautics for Pre-K



Teach science and literacy through stories.

6 integrated science lessons based on 6 popular children's books



High Flyers Alphabet Activity Book

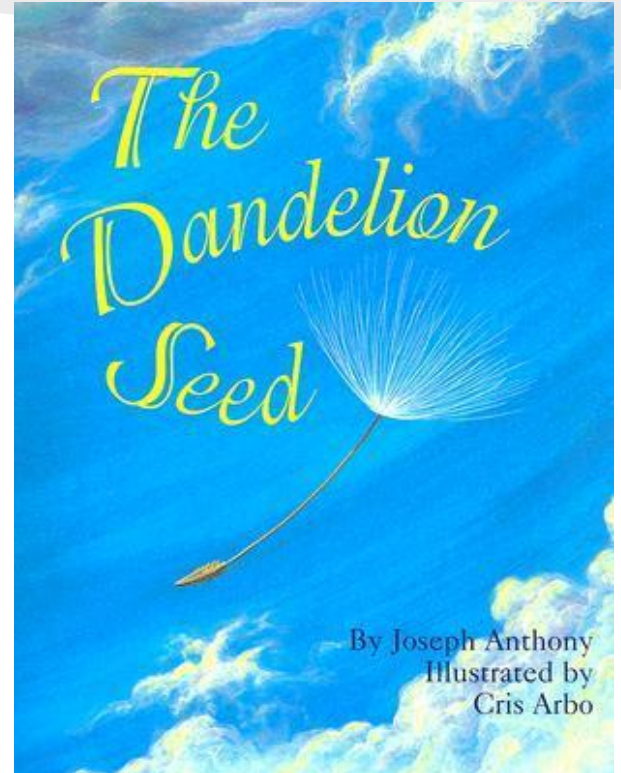


Math and Language
Literacy for K-2

Lesson 1: Gliders in Nature

Key Concepts: Form
and Function

Book: *The Dandelion
Seed* by Joseph Anthony



Lesson 1 Projects

Seed Show and Tell
Maple Seed Drop
Paper Gliders





More Easy Ideas + Add-Ons

Measure the Distance of a Blown Seed
Local Seed Scavenger Hunt
Design Your Own Seed
What Animals Glide? Trivia Challenge



Flying Fish, Photo Credit: NOAA



Mallard Duck, Photo Credit: USFWS



Penguins, Photo Credit: NSF

Related Titles

Flip, Float, Fly: Seeds on the Move by Joann Early Mackin

The Dandelion Seed's Big Dream by Joseph Anthony

Miss Maple's Seeds by Eliza Wheeler

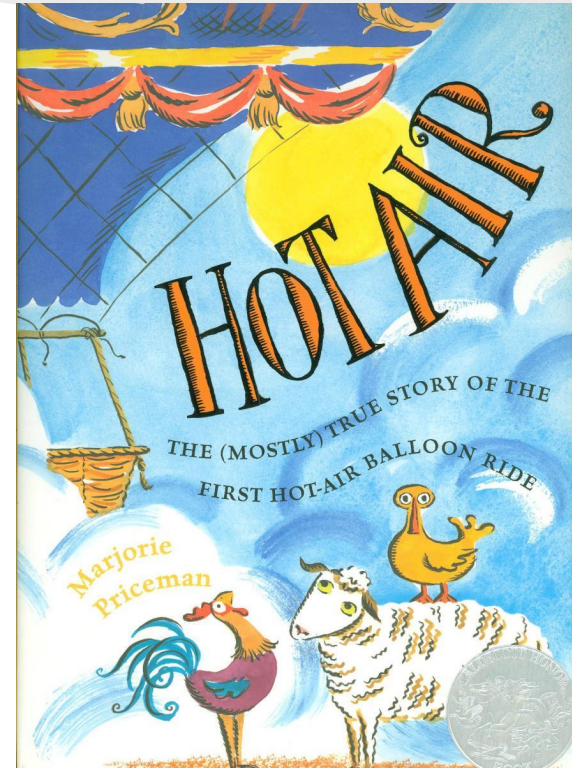
Blown Away by Rob Biddulph

The Flying Machine Book by Bobby Mercer

Lesson 2: Balloons

Key Concepts: Floating and Sinking, Weight

Book: *Hot Air: The (Mostly) True Story of the First Hot Air Balloon Ride* by Marjorie Priceman

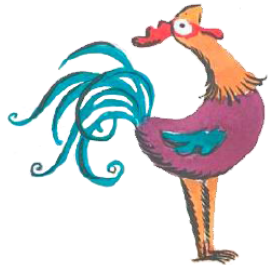


Lesson 2 Project

Sink and Float Balloons



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Child placing pieces of paper attached to the balloon.





More Easy Ideas + Add-Ons

Floating and Sinking in Liquids

Make an Aluminum Boat

What is a Solid, Liquid, Gas Trivia
Challenge

Sensory Bottles

Hair Dryer Hot Air Balloon



Related Titles

Sally's Great Balloon Adventure by Stephen Huneck

And Away We Go! by Miggy

Come Down Now, Flying Cow by Timothy Roland

Up (DVD)

The Amazing Air Balloon by Jean Van Leeuwen

Sky Sailors: True Stories of the Balloon Era by
David Bristow

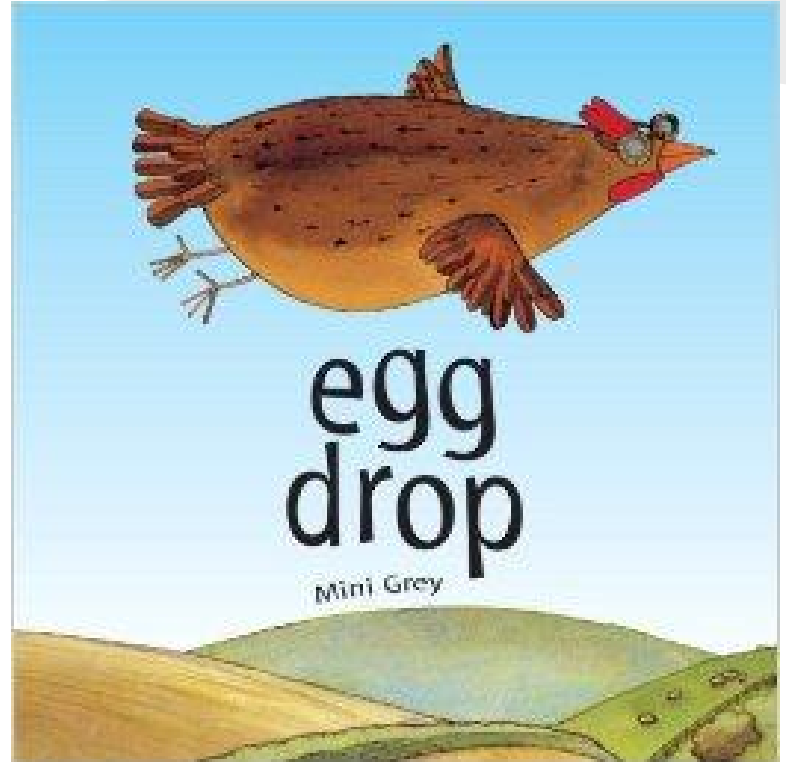
Lesson 3: Parachutes

Key Concepts: Fluid
Thickness, Drag

Book: Egg Drop by Mini Grey

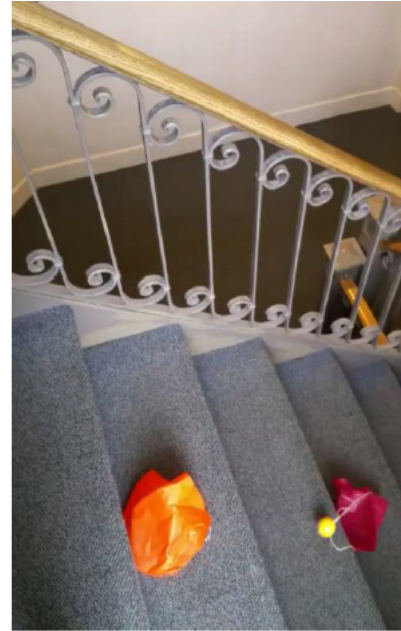


Egg Drop, pg. 9. © Mini Grey



Lesson 3 Project

Plastic Egg Parachute





More Easy Ideas + Add-Ons

How Fast Will It Fall?
Group Parachute Play
(Real) Egg Drop Challenge



Related Titles

Toot and Puddle Take a Leap by Laura Marsh

Parachute by Danny Parker

Mercedes and the Chocolate Pilot by Margot Raven

*The Candy Bomber: The Story of the Berlin Airlift's
"Chocolate Pilot"* by Michael Tunnell

Smokejumpers by Meish Goldfish

Thank you!

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