Kites In The Sky
Lesson Plans

About These Lesson Plans

We strongly recommend you demonstrate a completed, flying kite before you do anything else. Make no assumptions that your students have ever seen, held, or flown a kite! This can be a very short flying session, but should be motivating, and it's a great time to introduce vocabulary, procedures, and safety considerations.

HELPFUL RESOURCES:

How to Fly a Kite and Kites In The Classroom will give you a good overview of what you need/want to know about flying kites.

Fun Kite Facts

The fastest recorded speed of a kite is over 120 mph.

The world-record for the longest kite fly is 180 hours!

The highest that a kite has been flown is 12,471ft.

The largest number of kites flown on a single line is 11,284

EXPERIMENTING WITH KITE TAILS

Using the Dermer Sled kite from kitekits.com as an experimental platform, students are guided through an open-ended investigation about tails on kites.

Standards Addressed:

SEP1 Asking Questions And Defining Problems
SEP2 Developing And Using Models
SEP3 Planning And Carrying Out Investigations
SEP4 Analyzing And Interpreting Data
SEP5 Using Mathematics And Computational Thinking
SEP6 Constructing Explanations And Design Solutions
SEP7 Engaging In Argument From Evidence
SEP8 Obtaining, Evaluating And Communicating Info
CCC1 Patterns
CCC2 Cause And Effect: Mechanism And Explanation
CCC3 Scale, Proportion, And Quantity
CCC4 Systems And System Models
Ccc6 Structure And Function
Ccc7 Stability And Change

A Note for Teachers

Welcome to the wonderful world of flying kites with students! We've created structured activities to develop structured kite-oriented STEAM thinking (Science / Technology / Engineering / Art / Math).

We've described each activity and connected it to **NGSS** (Next Generation Science Standards) and/or Common Core Standards. We recognize that many locales in the United States recognize local standards which may supersede these. Fundamentally, kites are highly engaging and a great platform for STEAM. Whatever your standards targets, you can't go wrong with kites.

Many of the activities are adaptable to small group work and peer to peer sharing of results. Of course, the decision about how, when, and where to do those things is up to you and how you run your classroom. Does every student build a kite or do they work in pairs? Similarly, does every student open up their own computer to study an internet site or do you do it as a group or as an entire class?

As highly experienced teachers, we acknowledge that the best teaching occurs when teachers locate curriculum and modify it to best serve their students. While you are welcome to use our materials as we present them, they are NOT set in stone. Please adapt and modify as needed.

We'd love to hear from you about what worked and what was less successful. Send us a message and any photos you would like to share to **fun@kitekits.com**.

Experimenting With Kite Tails

This involves flying a kite, bringing it down, modifying the tail, and flying it again. You can set a number of experiments to perform or set a goal of doing enough experiments to be able to make a definitive conclusion. We start with a standard kite design and add tails of different length and design. Like engineers, we observe, record, and report results. Modify as needed for each level.

ALL LEVELS:

Use these slides, to introduces kite tails and get students thinking about how to make them.

DOWNLOAD THE SLIDES FOR ALL LEVELS

LEVEL 1: Elementary School K-5th Grades

Depending on the ages and skills of your students, you may want to have groups of 2 or 3 children build together, build a single kite as a class, or simply bring in a ready-to-fly kite, and do your tail experiments all together.

DOWNLOAD LEVEL 1 WORKSHEET

LEVEL 2: Middle School 6-8th Grades

Your students can each build their own kite and get it into the air! Kite building is also an excellent 2-person activity. An extra set of hands at this age can really help.

DOWNLOAD LEVEL 2 WORKSHEET

LEVEL 3: High School 9-12th Grades

Your students can each build their own kite and get it into the air! Encourage students to video their kites in the air as a documentation aid to analyzing performance and presenting results.

DOWNLOAD LEVEL 3 WORKSHEET

HELPFUL TIP

You'll probably want to take extra tail materials out to your flying location.

CLASS MEETING

Structure a time when students can report their findings to one another, and lead a discussion leading to conclusions about what the group has learned about tails.

How To Attach Kite Tails

Kite Tails are a quick way to add color and size to your kite and can make a child's art work even more dramatic.

Kite tails add stability to your kite in stronger winds by adding drag to the kite, making it fly better. In light winds your kite will need less tail or maybe no tail at all.

LEARN MORE & WATCH THE VIDEO