

Jason Hoch

Re-Submit Arts Scavenger Hunt

Arts Standards:

Visual Arts Standards for Creating VA:Cr1.1.Ia

Multiple approaches to begin creative endeavors. VA:Cr3.1.Ia

Visual Arts Standards for Connecting VA:Cn10.1.Ia

These standards would be applied across the design of a Tetrahedron Kite. I will use the historical context of kites as a framework for linking arts standards.

**Kites** were the first flying devices ever made by humans. The word "kite" comes from a bird in the hawk family known for its grace in the air. Kites come in a wide variety of shapes and sizes and have been used for many purposes throughout history, although today, kite flying is done largely for recreation. See Figure for an example of a tetrahedral kite, the type that students will be manufacturing in the activity.

Figure 4. Four-cell tetrahedron



Figure 5. Bridle attachment



Through questioning about the usage of kites this lesson will “Apply relevant criteria from traditional and contemporary cultural contexts to examine, reflect on, and plan revisions for works of art and design in progress.”

Ask:

What popular children's toy

- is used by teams of adults in competitions around the world?
- is often featured in poetry, legends, and folk tales?
- originated in China at least 3,000 years ago?
- was outlawed during the 18th century because it distracted shopkeepers from their duties?
- has been used to pull boats, carriages, sleds, and ice skaters?
- is a traditional New Year's gift for Japanese children?
- has led directly to major scientific discoveries?
- helped make Benjamin Franklin, Alexander Graham Bell, Wilbur and Orville Wright, Leonardo da Vinci, Guglielmo Marconi, and Homan Walsh famous?

Answer: The kite

Ask students the question one fact at a time. Invite them to write down the answer as soon as they know it and tell which fact helped them figure it out.

Through the analysis of manufacturing the lesson will document the process of developing ideas from early stages to fully elaborated ideas.

Ask and the following questions:

- How well did your team work together to build your kite? Were you efficient? Where was time wasted? What were the problems?
- Which improvement made for the largest difference in flight time?
- Did you follow the specific instructions and use the specified materials? Did you finish on time? How was the quality of the end product?
- Describe all the basic manufacturing system processes you used (cutting, shaping, forming, conditioning, assembling, joining, finishing, and quality control).
- What improvements would you make to the kite-making process?
- What is industrial engineering? (After listening to student suggestions, read the definition.) How is the kite-making your team did today a type of industrial engineering?