

PLTW Flight and Space Virtual Learning

8th Grade/Hot Air Balloon

April 28, 2020



8th Grade/Flight and Space Lesson: April 28, 2020 Day 1 of 2

Objective/Learning Target:
Students will learn about the history of flight in hot air balloons construct and fly a large hot air balloon.

Warm-Ups:

Quick Write: spend 2 minutes writing down everything you think you know about Hot Air Balloons. List as many names of parts as you can. Record your quick write on your <u>Cornell Notes</u> or notebook paper for the day.



Lesson Introduction/Background Information:

We will be learning about the history and use of balloon flight and in the next lesson we will build and test our own hot air balloon!

Let's start with a vocabulary study from Quizlet on <u>Hot Air Balloon Terms</u>. You will need the knowledge of these vocabulary to follow the directions to build your balloon.

Practice:

Next we will go on a WebQuest to learn about Hot Air Balloons.

Using the website <u>eballoon.org/</u>, look up and answer the following. Record your answers on your notes for the day.

Who is credited with the first Hot Air Balloon launch?

- 1. When was this event?
- 2. Who were his passengers?
- 3. Who made the first manned flight?
- 4. When, and by whom, was the first North American flight?
- 5. What has been the highest a balloon had flown?
- 6. What are the parts of a balloon?
- 7. Which of these parts do you think you'll make in this class?
- 8. Share with me 3 other items, facts, tid bits or pieces of information you found on the website, that you didn't learn previously.

Self-Assessment:

Try doing this Quizlet again and see if you are better at it this time. Hot Air Balloon Terms.

Answers:

- 1. Who is credited with the first Hot Air Balloon launch? Pilatre De Rozier
- 2. When was this event? On September 19, 1783
- 3. Who were his passengers? A sheep, a duck and a rooster
- 4. Who made the first manned flight? Joseph and Etienne Montgolfier
- 5. When, and by whom, was the first North American flight? On January 7, 1793 by Jean Pierre Blanchard
- 6. What has been the highest a balloon had flown? In 1960 Captain Joe Kittinger at a height of 102,000 feet
- 7. What are the parts of a balloon? Basket, Burner, and Envelope
- 8. Which of these parts do you think you'll make in this class? Answers vary
- 9. Share with me 3 other items, facts, tid bits or pieces of information you found on the website, that you didn't learn previously. Answers vary

Extend Your Learning/Continued Practice:

Learn about How Hot Air Balloons Work

Watch how Hot Air Balloons are Launched and Flown



