



ASSESSMENT: Birth of the Space Shuttle

Directions:

After reading *Birth of the Space Shuttle*, answer each question below. Be sure to answer in complete sentences and summarize using your own words.

1. Why did NASA believe the creation of a reusable launch vehicle was so important?
2. What was the project cost of the first reusable spacecraft designed in 1971?
3. Based on a new design, the projected cost was roughly \$5 billion dollars less than the 1971 estimates. What made this design so extraordinary?
4. What parts of this new design were to be reused, and what parts were expendable (not designed to be used again)?
5. What did Congress call the project to create a new reusable launch vehicle?
6. What year did the first orbiter come out of assembly, and what was its name?
7. Name the one major system not tested in Enterprise.
8. Why is the date April 12, 1981, important to NASA?

Exploring Further

1. The Space Shuttle Columbia had a 15' X 60' cargo bay. What was the cargo bay's area?
2. STS1 launched April 12, 1981, at 7:00:03 a.m. EST. Its duration was 2 days, 6 hours, 20 minutes, and 53 seconds. When did it land (date, hour, seconds, and a.m. or p.m.)? Show your work.
3. On the back of this sheet, draw a timeline based on the important dates mentioned in this article.