

ALL-IN-ONE!™

Space Exploration Middle School Teacher Instructions and Activity

Students will write a date from a space exploration timeline and an explanation of that date on a reproducible sheet.

Supplies needed: pencil, crayons or colored pencils, space timeline provided, reproducible sheet with space shuttle on it

Directions:

1. Pass out reproducible sheet and space timeline.
2. Assign an event to students from the space timeline.
3. Ask students to write their date and event on their sheet.
4. Direct students to color and decorate their sheets.
5. Ask students to present their sheets to the class and then hang them on the bulletin board in chronological order to create a timeline.

Space Shuttle Timeline

Overview of two decades of the U.S. shuttle program

by Liz Olson

1980s	1990s	2000s
April 12, 1981		John Young and Robert Crippin pilot the space shuttle Columbia on the maiden flight of the Space Transport System (STS-1).
Nov. 11, 1982		Space shuttle Challenger is launched.
June 18–24, 1983		Sally Ride becomes the first American woman astronaut on the STS-7 flight of Challenger.
Aug. 30, 1983		The STS-8 Challenger flight introduces Guion S. Bluford, the first African-American astronaut to travel in space.
Feb. 7, 1984		Astronauts Bruce McCandless and Robert Stewart make the first untethered space walks (with jet backpacks) on this Challenger flight.
Aug. 30, 1984		First flight of space shuttle Discovery.
Aug. 8, 1985		First flight of space shuttle Atlantis.
Oct. 3–7, 1985		Atlantis deploys a classified satellite for the Department of Defense.
Jan. 28, 1986		Challenger explodes 73 seconds into the flight.
Sept. 29–Oct. 3, 1988		The first shuttle flight after the Challenger disaster. Discovery launches a satellite.
May 4, 1989		The Magellan Venus probe is launched from Atlantis, the first U.S. planetary mission in 11 years and the first launched from a shuttle.
Oct. 18, 1989		Atlantis launches the Jupiter-bound Galileo spacecraft.
April 24–29, 1990		Discovery mission launches the Hubble Space Telescope.
May 2–16, 1992		Endeavour's maiden flight and the first 3-person spacewalk.
Dec. 2–13, 1993		This Endeavour flight successfully repairs the optics on the ailing Hubble Space Telescope.
Feb. 3–11, 1994		Sergei Krikalev becomes the first Russian cosmonaut on a U.S. shuttle mission.
Feb. 3–11, 1995		Eileen Collins becomes the first woman pilot, flying Discovery past the Russian space station Mir.

- June 27–July 7, 1995** Space shuttle Atlantis docks with the Russian Mir space station.
- March 22–31, 1996** U.S. astronaut Shannon Lucid is dropped off by Atlantis for a 181-day mission on the Mir, setting a record for a woman in space.
- Oct. 29–Nov. 7, 1998** The first American to orbit the Earth, John Glenn, returns to space aboard the Discovery.
- Dec. 4–12, 1998** Endeavour makes the first human flight to the International Space Station. The construction mission connects the Zarya and Unity modules.
- July 22–27, 1999** Col. Eileen Collins becomes the first woman to command a shuttle mission. Columbia launches the Chandra X-Ray Observatory.
- March 8–21, 2001** In the eighth shuttle mission to the International Space Station, Discovery picks up the Expedition One crew (delivered to the station in October by a Russian flight) and drops off Expedition Two.
- March 1–12, 2002** Columbia makes the fourth Hubble Space Telescope maintenance/repair/upgrade visit.
- Feb. 1, 2003** Fifteen minutes before completing its 28th mission, Columbia breaks up with the loss of all seven crew members.
- July 26, 2005** Eileen Collins commands Discovery on the first shuttle flight since the Columbia disaster. Despite the safety measures, in an incident similar to that which caused the Columbia disaster, some foam insulation broke off the external tank after takeoff. Discovery continues its mission, but NASA grounds any further shuttle flights indefinitely.
- July 4, 2006** The Discovery takes off for the International Space Station on the first Fourth of July liftoff, despite some reservations by the chief safety officer and chief engineer concerning the same foam insulation problem that downed Columbia in 2003 and also occurred on 2005's shuttle flight.
- August 8, 2007** Endeavour takes off for the International Space Station carrying the first teacher to ever visit space, Barbara Morgan. Morgan was once the backup to Christa McAuliffe, who was originally slated to become the first teacher in space, but was tragically killed in the Challenger disaster of 1986.
- October 23, 2007** Discovery launches into space for a 14-day mission to the International Space Station carrying a new module that will expand the living space in the orbiting laboratory.
- March 26, 2008** Endeavour safely returned from its 16-day mission to the International Space Station. The Endeavour delivered the first section of the Japanese Kibo laboratory and a Canadian Space Agency robot called Dextre—every international partner has now contributed a major part to the ISS.

Date: _____

Event: _____

