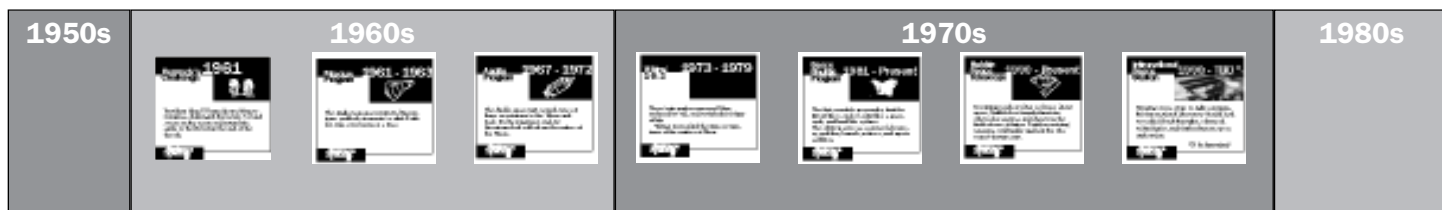


Celebrating Space



A Quick History

Get in the spirit of Space Day!

Create a space exploration timeline. The overview of space history and the milestones on the following two pages will launch you in the right direction.

Procedures

1. Post the years by decades on a wall, chalkboard or table, beginning with the 1950s on through the 2050s.
2. Have students sequence the milestones on the timeline.
3. Challenge students to create futuristic milestones for the decades spanning 2000–2050. (Like returning to the moon, colonizing Mars, etc.)
4. If time allows, students can research and add more milestones using the blank template. Here are some additional ideas:

1926 *Goddard's first liquid-fuel rocket*

1957 *Sputnik*

1958 *Explorer 1*

1974–1975 *Mariner 10 Mercury flyby*

1975 *Apollo-Soyuz*

1978 *Pioneer Venus Orbiter Encounter*

1979 *Voyager 1 & 2 Jupiter flyby Encounters*

1981 *Voyager 2 Saturn flyby Encounters*

1989 *Voyager 2 Neptune flyby Encounter*

Overview of Space History

Putting the Space Age Into Context

The dawn of the space age doesn't date back that far in human history—only 30 years! That's hardly a drop in the bucket compared to our cave dwelling days. It is so recent that you can get eyewitness accounts by asking your parents, grandparents and even some of your teachers where they were when Neil Armstrong took the first step on the moon!

How It Began

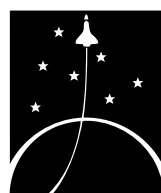
The first astronauts went alone, stuffed into capsules barely large enough for their bodies. They ate squeeze-tube food, and peered out at Earth through tiny portholes. Flights lasted only a matter of hours.

Where We Are

A lot has happened in 30 years. Today we routinely launch satellites to orbit Earth so we can learn about weather, and understand our environment. We build increasingly more advanced technology to explore our solar system, and peer into the far reaches of the universe.

For more in-depth space history activities, check out the official Embrace Space Web site:

www.spaceday.com



Challenger
CENTER

Another classroom activity from Challenger
Center for Space Science Education —
a proud Embrace Space partner.
1029 North Royal Street, Suite 300
Alexandria, VA 22314 (703) 683-9740
www.challenger.org

Mercury Program 1961–1963



The single-man spacecrafts in this program enabled astronauts to orbit Earth for only a few hours at a time.

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Kennedy's Challenge

1961



President John F. Kennedy, speaking to Congress, challenged the nation “to land a man on the moon and return him safely to Earth” before the end of the decade.

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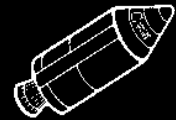
Gemini Program 1965–1966



These two-person spacecrafts extended missions to last up to two weeks and perfected space docking procedures in orbit.

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Apollo Program 1967–1972



The Apollo spacecraft carried crews of three on missions to the moon and back. By the program's end, 12 Americans had walked on the surface of the moon.

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Skylab 1973–1974



America's first space station, Skylab, housed three different three-man crews over nine months.

Skylab helped show the value of conducting scientific experiments for extended periods of time.

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Viking 1 & 2 1975–1976



These twin probes surveyed Mars, analyzed its soil and searched for signs of life.

Viking 1 provided the first-ever pictures of the surface of Mars.

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Space Shuttle Program 1981–Present



The first reusable spacecrafts, shuttles lift off like a rocket, orbit like a spacecraft and land like a plane. The orbiters serve as a science laboratory, and they launch, retrieve and repair satellites.

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Mir Space Station 1986–Present



Russian cosmonauts have broken space endurance records aboard this space station with stays of more than one year. Americans have been training on Mir in preparation for the new International Space Station.

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Galileo 1989–1997



The Galileo spacecraft has sent us flyby images of planets, asteroids and even the Shoemaker-Levy 9 comet collision with Jupiter in 1994. It is currently studying Jupiter and its moons.

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Hubble Space Telescope 1990–Present



Rewriting much of what we know about space, Hubble has found planets in other solar systems and shown us the birth of new galaxies. Regular servicing missions continually upgrade the telescope's instruments.

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International Space Station 1997–TBD*



Housing crews of up to eight scientists, this international laboratory should lead to medical breakthroughs, advanced technologies and further human space exploration.

**To be determined*

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