Make a Mission Patch!

Every Shuttle flight has its own mission patch, designed by the crew members. The mission patches always feature the astronauts' names (usually five to seven), and often include the Shuttle and important elements of the mission, such as particular experiments that the mission crew will undertake, or equipment that they are installing. Some examples of patches, and explanations appear below.

What You Need:

- Sheets of white and black construction paper or cardstock
- A variety of large patch outlines created out of cardboard (circles, ovals, rectangles, squares, badge-shapes); alternatively, put these shapes directly on the cardstock (one shape per page) and make copies.
- Crayons
- Scissors
- Glue
- Craft items, such as different colors of construction paper, yarn, glitter, tinsel, tissue paper

What To Do:

- Invite your child to create their own mission patch. Help them select a patch outline (shape) that appeals to them and trace around it on the construction paper.
- Have your child design the mission patch. The patch should include your child's name. Other names could be those of family and/or friends.
- What else does you child want to include? Often the patch has an image of the Shuttle.

Parent Prompts:

As your child is designing the patch, help them to think of what else they want to incorporate into their design.

What mission might the Shuttle be undertaking? (Fixing the Hubble Space Telescope? Installation of a laboratory on the International Space Station?)

What might the Shuttle astronauts be studying? (Earth? the Moon? Stars or galaxies? How plants grow in microgravity?)

What equipment might it carry? (A new telescope? Solar panels for the International Space Station?)

All of these things could be included in the mission patch design!

	STS-61-Endeavor launched in 1993, carrying “eyeglasses” for the Hubble Space Telescope (the actual piece of equipment was the Corrective Optics Space Telescope Axial Replacement , or COSTAR). The Hubble had been having trouble! The solution worked. The astronauts installed the eyeglasses, and the Hubble Space Telescope has been producing amazing images ever since. A new Shuttle mission is planned to the Hubble in 2009 to fix some malfunctioning software. NASA hopes that this will keep the Hubble going for many more years.
STS-67-Endeavor flew the Hopkins Ultraviolet Telescope for use aboard the Shuttle to study the ultraviolet light from planets, stars, and galaxies; this light can't penetrate the Earth's atmosphere and reach ground-based telescopes. In 1995, the astronauts used the telescope to characterize the gas between galaxies, obtaining data to help us understand the origin and development of the universe. The telescope is now on display at the Smithsonian's National Air and Space Museum.	
	Astronauts aboard STS-109-Columbia delivered new instruments to the Hubble Space Telescope in 2002. These instruments greatly increase the telescope potential for making new discoveries.

Information modified from: http://www.jhu.edu/~jhumag/0602web/space.html