

Design a Mission Patch

Overview:

In this activity, youth will form teams and design a mission patch for their group.

Goals:

- Learn about the symbolism and design of NASA mission patches.
- Learn about your teammates.
- Use teamwork and creativity to design a mission patch.

Time Required: 30-45 minutes

Materials:

- For each group/person:
 - Paper
 - Art Supplies (markers, crayons, pencils, etc.)
- For the class:
 - Pictures of mission patches (provided)

Procedure:

1. Divide your youth into groups of 3-4.
2. If possible, watch the video “Make Your Own Astronaut Mission Patch – ISS Science” at: https://www.youtube.com/watch?v=u6zHQ_GOoXc (approx. 4 min).
Another good video can be found here:
<https://nasaclips.arc.nasa.gov/video/ourworld/our-world-mission-patches>
(approx. 5min)
3. Ask students – “Why do you think astronauts design mission patches?”
 - a. Mission patches have been worn by NASA astronauts since 1965.
4. Look and discuss the pictures of the different mission patches (provided)
 - a. STS-7 – What do you notice? What mission do you think this is for?
 - i. Sally Ride became the first American Woman in space on the STS-7 Mission, the symbol on the right represents the 4 male and 1 female crew members. The 7 stars and the shape of the arm reflect the 7 mission number.
 - b. STS-118 – What do you notice?
 - i. There is lots of symbolism on this patch! The star with the yellow lines is a symbol for astronauts, The gray silhouette is the International Space Station they were helping to build. The space shuttle is shown. The maple leaf is for Canada (Astronaut Williams is from Canada). The flame of knowledge on the left is a symbol for teachers (Astronaut Barbara Morgan was a teacher). There are 7 stars for the 7 astronauts.



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- c. ISS Expedition 43-46 – What do you notice?
 - i. This is a special patch made for Astronaut Scott Kelly’s and Cosmonaut Mikhail Kornienko’s year-long stay on the International Space Station. The 1 is for the 1 year in space and is made up of the US and Russian flags. The design represents the Space Station orbiting Earth and the earth orbiting the sun.
 - d. Apollo 11 – What do you notice? What is missing?
 - i. The Apollo 11 mission patch shows the command module (the Eagle) landing on the moon. The Eagle carries an olive branch showing we came in peace. Names are not included on this patch because the mission was “for all mankind”.
 - e. For more patches and descriptions, check out this article:
https://www.washingtonpost.com/lifestyle/kidspost/nasa-crews-show-their-creativity-in-long-history-of-mission-patches/2018/07/16/b16b9052-83bf-11e8-8f6c-46cb43e3f306_story.html
5. Explain all mission patches typically contain the following items: crewmember’s names, mission number, and a picture that represents what the crew will do on the mission. Instruct students that they will be designing mission patches for their team.
6. Some questions to get the group started:
- a. What shape will you use for your design?
 - b. Instead of a mission number, groups could come up with a team name to use on their patch. What else could you use for a mission number (birthdays, ages...)?
 - c. What is something everyone in your group has in common? What makes each person unique? How can you include these on your patch?

Possible applications:

You could scan the group’s mission patches to a computer and:

- Print on “Shrinky Dink” plastic and shrink to make keychains or pins, print on sticker paper for stickers, print and make buttons (if you have a button maker)

Resources:

“Design a Mission Patch.” *Wondernauts*, www.wondernauts.org/design-a-mission-patch. Accessed 30 Apr. 2024.

Space Center Houston. *Mission Patch*, www.spacecenter.org/docs/Activities-MissionPatch.pdf. Accessed 30 Apr. 2024.

Wilson, Beth. “The Meaning of Mission Patches.” *Smithsonian National Air and Space Museum*, 7 Nov. 2017, airandspace.si.edu/stories/editorial/meaning-mission-patches.

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OSU EXTENSION
4-H YOUTH DEVELOPMENT

Apollo 11



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STS - 7



STS – 118



ISS Expedition 43-46

