

# Design a Mission Patch!

Space missions are given a name and a patch to help delineate themselves from other missions. These have always been a great way to blend art with space exploration!

**Target grade level:** All

**Suggested time frame:** 1 30-minute time block to cover the lesson, plus additional work time as needed



**Objectives:** I can identify the purpose of a mission patch.

## Materials:

- Mission patch template, one for each student
- Sample patches

## Procedure

1. Show students samples of mission patches. Discuss:
  - a. Symbolism used
  - b. Names of the mission
  - c. Astronauts displayed on the patch
  - d. Shape of the patch
2. Discuss how NASA has named missions - examples include Apollo, Gemini, Mercury, and Artemis. The individual space flights themselves often are delineated with a series of acronyms and numbers - like STS-15. Explain what the acronyms stand for.
3. Brainstorm a mission name for your Zero-G flight, a classroom project, or school event.
  - a. They may decide to use acronyms or Greek/Roman/religious characters from the stories they know.
4. Write a persuasive paragraph explaining why their name is the best.
  - a. If desired, students or staff can vote on the name they like the best. In my school, staff selected the winning name for the Zero-g flight experiments we were working on.

5. Design a mission patch to accompany the mission name
  - a. . If you had a winner selected, you can now require students to use that name on the patch. If you do not select a winner, students can design their patch with their own mission name idea. Then, select a set of requirements for the mission patch design. When I flew, I required the following:
    - b. Name of mission
    - c. A musical aspect (my experiments were related to sound and music)
    - d. A religious component (I teach at a private Catholic school)
    - e. A space component (to tie in with the space unit we were studying at the same time as our Zero-g flight preparation was occurring)
  
6. Once students are done with their mission patches, you could have students or staff select a winning patch and have it made using a local or online patch company. We had staff narrow down the winners to the top 10 patches from our school. Then, the students of the school voted in class for the one they liked the best. Our principal had the winning patch made for every student in the school. The students wore them on a lanyard the week that I was gone performing the experiments on the Zero-g flight. I also wore the winning patch on my flight suit. Additionally, I flew all of the students' patches in my flight bag, then returned each student's patch to them with "This patch flew in zero gravity on May 12, 2022" on the bottom.

**Assessment:**

- Students created a mission patch using all of the required components
- Students can explain the symbolism used in NASA mission patches, as well as the one they designed.

**Extensions:**

- Students can select a mission patch to learn more about and present their findings to their classmates.
- Students could design a game using what they know from the different mission patches.