

Mission Patch Design

Objective:

Students will learn about the history, symbolism, and artistic elements behind mission patches. They will design, draw, and describe their own original mission patch based on a personal or creative theme. This activity integrates art, science, and social studies to help students understand the significance of mission patches used in space exploration and other important missions.

Materials:

- Blank paper or template for drawing patches (round or shield-shaped)
 - Colored pencils, markers, crayons, or watercolors
 - Ruler (optional)
 - Writing materials (pencil, eraser)
 - Examples of mission patches from NASA or other organizations
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Preparation:

1. Gather reference images of real mission patches, such as NASA mission patches or those from other space or exploratory missions.
 2. Print or prepare templates for students to trace or use as the base shape for their patches (a circle or shield shape works well).
 3. Set up a space for students to create their designs and provide necessary art materials.
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Activity Timeline:

25 minutes per rotation. 5 rotations. 5 minutes between rotations. 27-30 students per rotation.

2 minutes: Introduction

20 minutes: Activity

3 minutes: Discussion

Activity Instructions:

1. Introduction to Mission Patches:

- Start by explaining what a mission patch is: "A mission patch is a special symbol or design that represents a mission or a group of people working on something important, like a space mission, scientific expedition, or even a sporting event."
- Show students examples of real mission patches, such as NASA's Apollo mission patches, SpaceX patches, or historical patches from past space missions.
- Discuss the purpose of mission patches: to represent the mission's goals, commemorate key moments, honor team members, or showcase symbols related to the mission's location or purpose.

2. Key Elements of Mission Patches:

- **Symbolism:** Explain that mission patches often contain images that represent the mission's goals. For example, a rocket represents space exploration, a planet represents the mission's destination, and stars represent achievement and discovery.
- **Team Identity:** Talk about how many patches feature the names or roles of the astronauts or team members involved.
- **Color and Shape:** Discuss the use of colors and the choice of patch shape (circle, shield, triangle, etc.) and how these elements can express the mission's theme or focus.
- **Words and Numbers:** Sometimes patches include the name of the mission, the year, or even a slogan that reflects the mission's purpose.

3. Designing Their Own Mission Patch:

- Tell students they will create their own mission patches, and it can be based on something they care about or something they dream of accomplishing (space exploration, a future journey, or even a personal achievement).
- Ask them to think about:
 - What is the mission about? (Is it a space mission, a trip to a faraway place, or a special project?)
 - What symbols can represent that mission? (A rocket, a star, a mountain, etc.)
 - What colors can express the mission's theme? (Bright colors for excitement or dark colors for mystery, etc.)
 - Do they want to include any words, numbers, or phrases that reflect the mission? (For example, a name, a year, or a motto like "To the stars!")

4. Drawing the Mission Patch:

- Give each student a blank sheet of paper or a template to start their patch. They should use the drawing materials provided to create their designs, focusing on the colors, symbols, and text that reflect the theme of their mission.
- Students can either:
 - Draw the patch by hand or trace the template.
 - Use rulers to help with straight lines or shapes, if needed.

- Incorporate creative patterns, like stars or planets, to make the patch unique.
5. **Writing a Description of Their Mission Patch:**
- After designing their patch, ask students to write a short description of their mission and what their patch represents. They should explain:
 - The name of the mission
 - What the patch symbols stand for
 - The colors they chose and why
 - Any words or phrases included in their design and what they mean
6. **Sharing Their Mission Patches:**
- Once the patches are complete, organize a "Mission Patch Gallery" where each student presents their patch to the class. They should describe their mission, the design elements, and what each symbol and color represents.
 - Allow students to ask questions or give feedback to each other on their designs.
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Discussion Questions:

- **Why do you think mission patches use symbols? What do symbols help us understand?**
 - **What does your mission patch represent, and why did you choose that theme?**
 - **How did the colors and shapes in your patch help tell the story of your mission?**
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Conclusion:

- Wrap up the activity by discussing how mission patches are more than just art—they are a form of communication. Each element (symbol, color, text) helps tell the story of a mission.
 - Encourage students to think about the real missions they are inspired by and how art and design can play a role in representing their goals and dreams.
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Extension Activity (Optional):

- Have students work in pairs or small groups to design a "team" mission patch for a fictional mission, like exploring a new planet or saving the environment. They can collaborate on symbols, colors, and text for their joint mission.