FACILITATOR GUIDE



Learning objectives

- Space travel is an impressive achievement that requires complex teams working together and lots of resources.
- Space-flown medallions help commemorate NASA missions and human exploration of space.
- Objects that have been to space are prized as rare and valuable.

Materials

- 3" pre-cut paperboard disks
- Heavy-duty aluminum foil
- Etching tool(s)
- #2 pencils
- Optional: Tape
- Optional: Scissors and more paperboard or cardstock to make additional 3" circles

Safety

If you run out of pre-cut disks you can make your own 3" circles from paperboard, also called chipboard, or cardstock. Corrugated cardboard is too soft. If visitors cut their own circles it will take a bit more time and younger learners will require supervision.

Advance preparation

Cut the foil into uniform squares roughly five inches wide. It may be helpful to have a few premade foil medallions on hand to provide to younger participants or if participants get flustered by the wrapping process.

Notes to the presenter

While participants work on wrapping the foil to create their medallion, engage them in conversation about space: Why would they go to space? Why is their space mission important?

Tinfoil can rip if pressed too hard. It's a good idea to warn participants that this may happen. Have them begin by pressing lightly and gradually increase the pressure. Encourage them to experiment with different tools to get the detail they want.

To further extend the activity, offer the suggestion that participants can carefully "unwrap" their paperboard circle and flip the aluminum foil over to reveal their embossed design. Tape is included incase participants want to fix the tinfoil around the disk to create a more permanent take-home keep-sake. When you run out of premade paperboard disks, you can cut circles from cardstock or cereal box weight cardboard. Corrugated cardboard is too soft.

Discussion prompts

Start a conversation with participants about why people attribute value to certain objects and whether or not they think an object is more valuable because of its history. These questions are a good opportunity to introduce participants to the concept of space-flown medallions and why they remain a popular item for astronauts to design and bring to space.

- Have you ever made or purchased a memento or souvenir to remind you of a trip you went on? How did it help you remember your trip?
- If you were on a space mission, what would be most important to you? Would it be research, landing on a moon or planet, establishing a base, your crewmates, or something else? How will your medallion reflect this?
- Personal medallions can also reflect cultural values and symbols. What symbols mean a lot to you, and why do you think they are important to include on your medallion?
- Would you share your medallion, or keep it to yourself as a personal treasure?
- Why do you think people assign such high value to these objects?
- How much do you think your medallion is worth right now? How much do you think it could be worth if it traveled to space and back again?

Common questions

How valuable are space-flown medallions? It depends on the object. Medallions from missions that we see as particularly important are highly valued. A gold medallion carried by Neil Armstrong on the Apollo 11 mission (the first Moon landing) recently sold for over two million dollars! Other space-flown items, like pieces of equipment and mass-produced coins that contain a small amount of space-flown metal melted into them, can sell for much less—around \$25.

Why are some of the coins valued so highly? The history of an item, or its *provenance*, can change its value. Because space travel is still quite rare and some of the medallions represent



"first" missions (e.g., the first person on the Moon), many people determine that these medallions are very valuable.

Do astronauts make their own medallions? Astronauts often design the medallions that commemorate their missions, and the designs are approved by NASA. The coins are then minted by the Robbins Company in Massachusetts, as they have been since 1968.

Background information

Medallions made specifically for NASA space missions have been produced since the first crewed Gemini mission in 1965. The medallions typically contain information about the mission in the form of pictures, symbols, and short phrases. Astronauts often design the quarter-sized medallions, but NASA must approve the designs. Some space-flown medallions for sale today are the actual coins that astronauts brought with them to space, and others made for the mass market contain a small percentage of space-flown metal melted into them.

Additional resources

Learn more about the Artemis Moon mission and Artemis Base Camp here: www.nasa.gov/specials/artemis/

Staff training resources

Activity Training Video: https://vimeo.com/836955250

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