

Spacecation™ OVERVIEW

Get ready for an out-of-this-world vacation to space! Children follow a fantastical itinerary filled with awesome astro-adventures that are rooted in real-world, cutting-edge space exploration science. Spacecationers engineer a personalized Spacepack, design a Spacecraft, and construct an Astro-Arm to use throughout their trip. After docking their Spacecraft at the ultra-cushy Wonders of Weightlessness (WOW) Space Hotel, they experience microgravity with a spacetastic cooking challenge, erupting ice volcanoes, and mining for rare metals, the ultimate payload. Spacecationers also collect data and make observations about an egg that eventually hatches to reveal a surprise animal. As their vacation draws to a close, children make an amazing discovery about ice on the Moon and fuel up before blasting off back to Earth.

SESSION ONE

- *Galactic Ticket*
- *Pack Your Spacepack*

In Session One, Spacecationers receive their Galactic Ticket to space and an itinerary full of specialized space excursions. Before blasting off, children design and build a Spacepack to carry their belongings and pack their bag in preparation for a vacation among the stars!

SESSION TWO

- *Astro-Arm*
- *WOW Space Hotel*
- *Spacecraft Innovation (Optional Activity)*

In Session Two, Spacecationers assemble an Astro-Arm to help them get a grip on the adventures that await. They lift off and travel beyond Earth's atmosphere and then carefully dock their Spacecraft at the WOW Space Hotel. Upon arrival, Spacecationers visit the hotel laboratory and see a mystery animal egg that they will gather data on each day.

SESSION THREE

- *Queen of the Asteroid Belt*
- *Eggs-citingly Hatched*

In Session Three, Spacecationers head to dwarf planet Ceres, the Queen of the Asteroid Belt! The itinerary for the day includes mining an asteroid with a modified Astro-Arm and taking a scenic spacewalk. After checking on their egg, participants conduct a well-visit on their hatched animal by recording its growth, documenting observations, and discovering that it is healthy and fit for travel.

SESSION FOUR

- *Europa-rty!*
- *Io Lava Pizza Party*
- *Still Growing*

In Session Four, children experience hot and cold, space style. They trek near an erupting ice volcano and have a surprise glow-in-the-dark experience on Jupiter's Ice Moon, Europa! Spacecationers blast off to Io, the most geologically active body in the solar system, which is nicknamed the "Pizza Moon." Using their Astro-Arm, they race to assemble a pizza while microgravity works against them and then cook their delectable dinner using the heat from Io's molten lava lakes.

SESSION FIVE

- *All Grown Up*
- *Lunar Gas Station*

In Session Five, Spacecationers perform one last data check on their animal and then head out for the final excursion. After harnessing the power of the Sun to turn the Moon's ice into rocket fuel (a technique currently being investigated by NASA), children fuel up their Spacecraft and use their Astro-Arm to grab snacks at the new lunar gas station for their trip home!

Session One OVERVIEW

Destination Spacecation

In Session One, Spacecationers receive their Galactic Ticket to space and an itinerary full of specialized space excursions. Before blasting off, children design and build a Spacepack to carry their belongings and pack their bag in preparation for a vacation among the stars.

ACTIVITY ONE | GALACTIC TICKET

- Point out the Galactic Ticket on page 3 of the Inventor Log, and have Spacecationers write their name on it.
 - Discuss solar systems. Play the "Vacation Among the Stars" Track.
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ACTIVITY TWO | PACK YOUR SPACEPACK

- Have children write two activities they would love to do on a vacation to space in their Inventor Log.
- Ask questions and discuss packing and designing a pack for a vacation in space.
- Show the Spacepack digital poster, and discuss features of astronaut Spacepacks.
- Review the tips for making the body, straps, and features of a Spacepack, and discuss hook-and-loop dots and George de Mestral's invention.
- Play the "Spacepack DIY Tips Music" Track.
- Have Spacecationers build a personalized Spacepack.

SETTING THE STAGE

Program Hygiene Protocol

- Sanitize hands prior to handling materials. Sanitize all shared materials in between uses. When time is designated to "distribute materials," arrange the materials so they can be easily accessed without cross-contamination.
- Pretear strips of masking tape and duct tape for children to take throughout the session.
- Locate and label a box to hold all materials that need to be sanitized. Have children return used items to this box so that Instructors and Leaders know what items need to be sanitized.
- Follow local health and safety protocol for spacing children and additional measures.

Instructor Guide

- An Instructor Guide has been provided online at the Resource Center (resources.invent.org). Review it prior to the program for information on the key components of a successful program along with facilitation strategies and inclusion accommodations.

Inventor Supplies

- Inventor Supplies are recyclable and upcyclable items (e.g., empty jugs, fabric, old toys, cardboard, containers, etc.) brought in by the program participants.
- Some of the activities make use of these materials for designs and inventions.

- ✓ During Session One children may use a large amount of recyclables when making Spacepacks, but that is okay. The remainder of *Spacecation* will only use recyclables in Session Three, when children have the opportunity to add onto their Spacepacks.

- ✓ If any participant does not have access to recyclables, a Spacepack can be made out of the provided thin cardboard, white cardboard boxes, and/or paper plates. The boxes that materials are shipped in may also be cut into pieces for children to use. Alternatively, children may choose to make miniature Spacepacks with General Material items.

Instructor-Only Videos

- Refer to each Instructor-Only video online at campinvention.org/curriculum-videos for setup guidance, as well as curriculum facilitation tips and insights.

Arrange the Space

- Arrange desks or tables to create work spaces for children. The work spaces may be individual or clustered in five groups.
- Identify a location to store the participant's Spacepacks. They will be used throughout the program.
- Set up a Glue Gun Station near an outlet as follows:
 - Place a piece of thin cardboard on a workspace. Set the glue gun and glue sticks (for glue gun) on top of the thin cardboard.
 - Plug in the glue gun. It needs approximately 5 minutes to warm up.
- ✓ Unplug the glue gun at the end of each session.
- ✓ The glue gun should only be used by Leaders and Instructors.

- ✓ Throughout this curriculum, there are many opportunities to empower Leadership Interns and/or Leaders-In-Training to support both the Instructor and the participants. Look for the term "Leader," and maximize these opportunities to streamline planning ahead and engage them in supporting the activities and participants.

- Create a Space Tools Wall as follows (**see Figure 1**):

- Use the permanent marker to write the header "Space Tools" at the top of one piece of thin cardboard.
- Peel the backing off the loop side (i.e., fuzzy side) of five hook-and-loop dots, and stick one on each mini blacklight.
- Place each mini blacklight on top of the hook side (i.e., rough side) of a hook-and-loop dot, lining up the loop dot with the hook dot.
- Peel the backing off the hook side, and stick the blacklights onto the thin cardboard, ensuring adequate space for each one.
- Hang the Space Tools Wall in a location that is easily accessible to all children.

- ✓ Keep the blacklights off to conserve battery life.

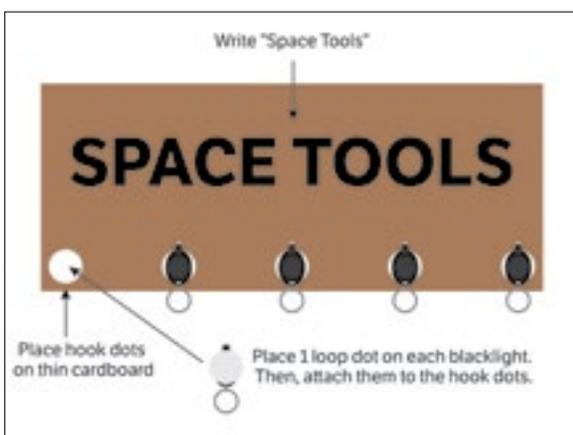


Figure 1. Space Tools Wall

- Cut the metallic mylar into pieces approximately 5–6 inches wide.
- Cut the mesh tubing into approximately 6-inch sections.
- Prepare General Materials by laying out the following items on a surface for children to access:
 - Aluminum foil
 - Cardboard boxes, white
 - Coffee filters
 - Craft sticks
 - Duct tape
 - Hook-and-loop dots
 - Markers
 - Masking tape
 - Mesh tubing, cut
 - Mylar; metallic, cut
 - Paper cups, 3-ounce
 - Paper plates, black
 - Permanent marker, black
 - Pipe cleaners
 - Pom-poms, large
 - Pom-poms, small
 - Ribbon
 - Rubber bands, large
 - Scissors
 - Spoons
 - Star stickers
 - Straws, bendy
 - String
 - Thin cardboard

- ✓ Keep General Materials accessible throughout the program. To ensure that these items are available, ration them.

- To create a more immersive *Spacecation* experience:
 - Wear items that would be worn during a vacation or that are space-themed (e.g., sunglasses, lei, flower shirt, astronaut helmet, boots, thick gloves, NASA shirt, name badge, etc.).
 - Consider modifying an old backpack into a Spacepack by wrapping it in a shiny material, such as aluminum foil and adding knobs, tubes, and patches made out of recyclables or craft items.

Prepare the Media

- The Camp Invention program has provided media tracks containing music, posters, and/or videos.
- Access all media tracks online at: campinvention.org/curriculum-videos. Review and download all media tracks prior to the program start for ease of use.

✓ Ensure there is video and audio capability to play videos and music that can be seen and heard by the entire class.

✓ Use the music tracks to create ambiance while participants are designing and inventing.

Display the Graphics

- Most of the program's graphics are digital. Access all digital posters online at: campinvention.org/curriculum-videos. Review and download all digital poster tracks prior to the start of the program for ease of use.

Inventor Log Sticker Page

- The Inventor Log includes a sticker page. Caution children to only use the stickers when and as instructed.



Prepare Ahead For The Oldest Class Only Session Two, Activity Two

- For the Oldest Class Only, fill five of the resealable plastic bags that the Camp Invention materials were sent in with water. They should be approximately one-half to two-thirds full.
- Lay them flat in a freezer overnight to make ice packs for use during Session Two.

✓ The five ice packs will be placed in the aluminum steam pans to cool the water for a spacesuit cooling activity.

ACTIVITY ONE

Galactic Ticket

Children use a Galactic Ticket to travel to outer space. They discover more details about their upcoming spacecation.

Materials

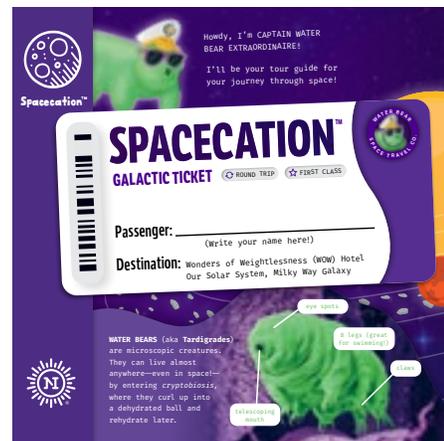
- Inventor Logs
- Markers

Time

5–10 minutes

Step-By-Step Instructions

1. Play one of the "Spacecation Background Music" Tracks as participants are entering.
 1. Welcome children and say the following:
 - Who is ready to go on a vacation? I know I sure am!*
 - I have some fabulous news. We have each been gifted a ticket that will take us somewhere truly out of this world! In fact, it is a Galactic Ticket for a one-of-a-kind trip beyond Earth's atmosphere!*
 - That's right, we are going on a spacecation!!!*
2. Distribute a marker and an Inventor Log to each Spacecationer.
3. Have them write their name on the Galactic Ticket on the first page in the Spacecation section of their Inventor Log, page 3.



4. On the same page, point out the cartoon image of Captain Water Bear Extraordinaire and the photo of a water bear (a microscopic animal known as a tardigrade).

5. Explain to all Spacecationers that water bears are microscopic animals that National Aeronautics and Space Administration (NASA) has sent into space because of their amazing abilities to survive in extreme environments.

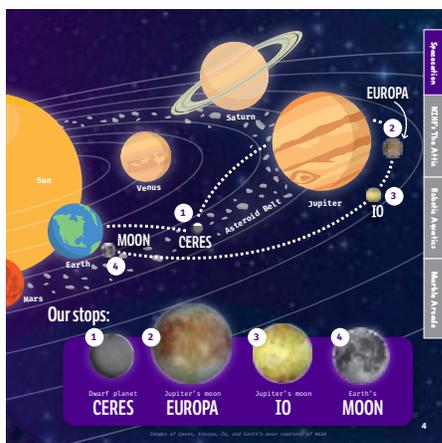
- Additionally, say the following to Intermediate participants:

NASA hopes to apply discoveries of what makes water bears able to survive in space to help astronauts survive for longer periods of time in space.

This would allow for them to travel even farther into space, which might lead to more amazing discoveries about our solar system!

NASA also seeks to use their water bear research to better preserve biological materials that astronauts need, such as food and medicine.

6. Have children look at the Solar System Map in their Inventor Log on page 4.



7. Say the following:

This log will serve as an AstroTravel Guide with all sorts of information on where to go and what to do when vacationing in our solar system.

Our solar system includes our Sun, the eight planets including Earth that orbit around the Sun, all of the moons that orbit the eight planets, and other tinier objects like asteroids, meteoroids, and comets.

The log also includes areas to write a postcard to family and friends back home, to record memories, and to sketch space-inspired ideas.

8. Tell Spacecationers that they are now going to watch a video from their spacecation tour guide that will tell them more about their upcoming trip among the stars.

 Play the "Vacation Among the Stars" Track, or read the transcript at the end of the curriculum.

9. Say the following:

Alright, this vacation sounds absolutely amazing! I cannot wait to go, so let's get started making a Spacepack to pack for the trip!

Primary Guiding Questions

- What is exciting about space?
- What is one thing you could not leave home without?
- What makes you nervous about space?

Intermediate Guiding Questions

- Why do you think invention is important for space exploration?
- What is one must-have item for you on a vacation to space?
- Where would you like to visit in space? Why?

Primary Discussion

Ready to make your reservation for space travel? One day, space travelers might use a system to reserve their travel that was inspired by National Inventors Hall of Fame Inductee Evelyn Berezin's invention of computer systems for business use. She designed one of the earliest computer reservation systems for airlines that connected people to flights in a matter of seconds.

Intermediate Discussion

Making reservations for travel, space or otherwise, businesses use computer programs and logic design systems tailored to their needs. National Inventors Hall of Fame Inductee Evelyn Berezin designed one of the earliest computer reservation systems for airlines that connected people to flights in a matter of seconds. Her technology makes it easier for customers to find exactly what they need and it helps businesses coordinate their services to run smoothly.

ACTIVITY TWO

Pack Your Spacepack

Children design and build a Spacepack for their journey.

Materials

- General Materials (3-ounce paper cups, aluminum foil, bendy straws, black paper plates, black permanent marker, coffee filters, craft sticks, duct tape, hook-and-loop dots, large pom-poms, large rubber bands, markers, masking tape, mesh tubing, metallic mylar, pipe cleaners, ribbon, scissors, small pom-poms, spoons, star stickers, string, thin cardboard, white cardboard boxes)
- Glue Gun Station (colored glue sticks, glue gun, thin cardboard)
- Inventor Logs
- Inventor Supplies
- Markers
- Spacepack digital poster

Time

Remainder of the session

Step-By-Step Instructions

1. Have children turn to the next Spacecation page in their Inventor Log, page 5, and write down or draw two of their favorite ideas for activities they would love to do on vacation (i.e., go swimming, play mini golf, zip line, etc.) in the designated space.



2. Allow a few participants to share their ideas.
3. Ask them to think about how those activities might inspire two features on their Spacepack.
4. Say the following:

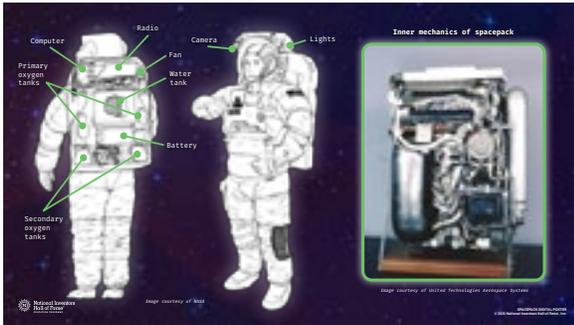
 *As you start dreaming up designs and features for your Spacepack, think about your school backpack or a backpack you might take on an overnight trip. What sorts of features do they have?*

 *Think about what is missing that you could add to make the pack even better.*

 *What would you want to bring with you to a vacation here on Earth?*

 *What would be different that you want to have if traveling through space?*

5. Show children the Spacepack digital poster. Tell them that NASA calls an astronaut's backpack the Life Support System. Explain that it has oxygen for the astronaut to breathe, water to keep them cool in space, and a radio to help them communicate with each other.



6. Encourage Spacecationers to include some of these features (e.g., carrying oxygen, water, and communication systems) as part of their Spacepack.
7. Share that to begin designing, children should consider what to use as a base for their Spacepack.
8. Explain that they might use boxes or containers from the Inventor Supplies or General Materials.
9. Point out the white cardboard boxes, and demonstrate how to fold them (**see Figure 2**):
- Stand the box up with the flat edge on the table.
 - Open it up.
 - Fold down the big tab on top.
 - Fold down one side tab.
 - Fold down the other matching side tab.
 - Fold down the small bottom tab.
 - Tuck it in.

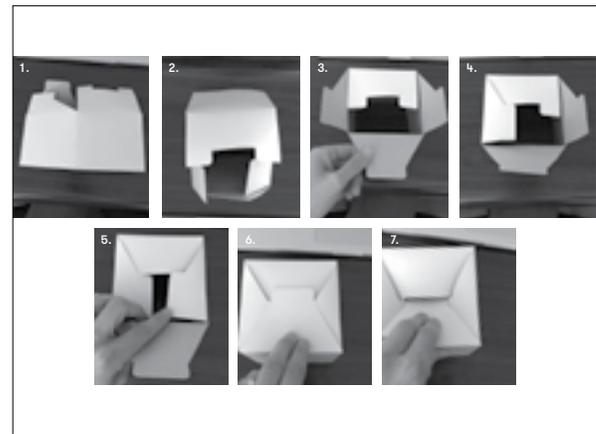


Figure 2. How to Fold the Box

10. Explain that the base does not have to be a box, but instead could be flat with other features attached on the outside.
11. Tell Spacecationers that they should also think about how they might carry, put on, or take off their Spacepack. Share that there are a variety of strap or handle styles to consider (e.g., crossbody, long single strap, backpack straps, briefcase handle).
12. Grab a roll of duct tape from the General Materials, and demonstrate how to fold duct tape in half lengthwise to make straps.
13. Share that straps can also be made by:
- Looping together rubber bands
 - Connecting pipe cleaners
 - Tying string, ribbon, or tubing
14. Share that their Spacepack should also have unique features, including storage such as pockets, compartments, loops, and extensions.
- ✓ Encourage children to think of "wild" ideas like a candy dispenser; a built-in camera or stereo; or a camouflaging, color-changing design.

15. Tell Spacecationers that astronauts use hook-and-loop fasteners as a quick way to attach objects to themselves or the wall so that they will not float away in zero gravity.
 16. Show children the General Materials, and point out the hook-and-loop dots. Explain that they will need to take both the fuzzy (loop) dot and the rough (hook) dot for it to work.
 17. Tell participants that VELCRO®* Brand fasteners were invented by National Inventors Hall of Fame Inductee George de Mestral after he observed the way the hooks of a burr stuck to the fuzzy fur of his dog after a long walk through the woods.
 18. Tell children that they can use any items from General Materials along with recycle items from the Inventor Supplies to create their Spacepack.
 19. Show participants the Glue Gun Station, and explain that there are also decorative color glue sticks.
- ✓ Have a Leader operate the Glue Gun Station.
20. Tell participants that they may use any of the Spacecation stickers from the sticker page in their Inventor Log to decorate their Spacepack.
 21. Explain that as they build, a video with DIY tips for making straps, attachments, and other features on their Spacepack will be playing to inspire their thinking!
 22. Have Spacecationers begin building their Spacepack.
- 🎵 Play the "Spacepack DIY Tips Music" Track as participants build.
23. Have children each write their name on their Spacepack and store them in the designated area for their class. Tell them to keep their Inventor Log.
- ✓ Children will have additional time to work on their Spacepacks in Session Three.
- ✓ At the end of the last session, prepare the ice packs for the Oldest Class Only to use for Session Two, Activity Two. See the Setting the Stage section for instructions.

Primary Guiding Questions

- Do you want to be an astronaut someday? If yes, why?
- If you could visit anywhere in space, where would you go? Why?
- What might be exciting about exploring outer space?

Intermediate Guiding Questions

- Does a career in space exploration or technology interest you? Why?
- What would be the ultimate space exploration experience?
- How might you include unique features on your Spacepack that are accessible without having to take it off?



Primary Discussion

Who says astronauts cannot take time out to play games during their space missions? NASA astronaut Alan Shepard took a golf club into space and used it to play golf on the Moon! The golf club was especially designed for space travel so that it did not take up valuable room aboard the spacecraft. It was collapsible and was created by combining an instrument used for collecting soil samples with the head of a golf club. When Shepard hit the golf ball on the Moon, it traveled very far and hung in the air much longer than it would have on Earth due to the lower lunar gravity.

Intermediate Discussion

Product engineers work in a team to design an item that can be manufactured and made available for sale. Think about the variety of bags, backpacks, suitcases, and pouches that are available and what kind of conveniences they offer the user. Product engineers create new designs that are desirable in the marketplace, make prototypes of those designs, test and redesign their prototypes, and then oversee the manufacturing process to build the product. There are product engineers for everything from a writing utensil to toys to an entire vehicle. They brainstorm the same functional and aesthetic features that you are considering for your Spacepack.

INSTRUCTOR BACKGROUND

SESSION ONE

Spacecation Content

While this module encourages children to use their imaginations to envision taking a vacation to outer space, the locations, inventions, and interstellar activities are all based on real science. Similar to how the animated tardigrade host Captain Water Bear Extraordinaire is based on a real animal, the fantastical nature of the excursions, such as mining an asteroid, watching an ice volcano erupt, and cooking food at a lava lake, are all rooted in reality.

These excursions could all potentially be a part of future space travel. Even transforming the Moon's ice into rocket fuel is based on the real-life science currently being studied. Not only does the presentation of this module make space travel exciting for children, it is even more thrilling to discover that it is all possible and could be part of their future as budding innovators.

Tardigrade

The eight-legged, microscopic creature that inspired Captain Water Bear Extraordinaire is called a tardigrade. "Water bear" and "moss piglet" are colloquial names that may have helped to make tardigrades popular beyond the scientific community.

Recently, tardigrades have been part of many studies and experiments to understand their limits for survivability. They have been found in the lowest layer of the ocean, the deep sea, as well as the top of the Himalaya. They were taken aboard the ISS in 2011. The majority of tardigrade experiments have revealed that they can survive some of the harshest environments by dehydrating themselves to

suspend their metabolic processes, known as cryptobiosis. In this state, they can survive without food or water for over 30 years.

Typically, tardigrades can be found living on moss and lichens, and they eat mainly plants and bacteria. Each of their legs has several claws, though they mostly travel using locomotion. While their bodies are see-through, they can be seen using a low-power microscope.

Space Travel

In April 1961, a Russian cosmonaut named Yuri Gagarin was the first human to be launched into outer space. His flight lasted 108 minutes and orbited Earth one time. Alan Shepard was the first American astronaut to travel in outer space. He voyaged on a Mercury spaceship in May 1961. Shepard's flight lasted just 15 minutes and was followed a year later by John Glenn's voyage to orbit Earth.

Cosmonaut Valentina Tereshkova was the first ever woman in space in 1963. A textile worker with an avocation for skydiving, Tereshkova was selected out of over 400 applicants. Her experience in skydiving made her a great candidate for space travel because, at the time, cosmonauts had to parachute from their space capsules upon returning to Earth. She spent 18 months training, flew in space for three days, and orbited the Earth 48 times.

It took 20 more years for the first American woman to travel to space. Sally K. Ride was aboard the Challenger when it went into orbit in June 1983. She was in space for six days, conducting experiments and helping to deploy communication satellites.

International Space Station

The International Space Station (ISS) orbits the Earth about 249 miles above it, cruising at a maximum speed of 17,150 miles per hour. Equipped with a laboratory full of new technologies, the ISS is the base for many scientific studies and observations of space, planets, and other astronomical bodies. One central focus is studying the effect that being in space has on people, animals, plants, and other objects.

Six astronauts are typically aboard the ISS at a time, staying an average of 4–6 months. Astronaut Scott Kelly stayed on the ISS for a record-breaking full year. While on board, he and his fellow crew members were the first U.S. astronauts to eat lettuce in space, which they had grown themselves.

During Kelly's year in space, they also grew the first flower in space—a zinnia. It was a challenging experiment, which provided a lot of valuable information on how to grow plants in microgravity.

National Inventors Hall of Fame Inductee George de Mestral

George de Mestral patented VELCRO®* Brand fasteners, an efficient way to fasten fabrics and other materials. The idea came to him after observing the way a burr's barbed hooks clung to clothing. He found the logistics of attaching hundreds of tiny hooks to cloth tape to be a challenge, but eventually his hook-and-loop fastener was manufactured as VELCRO®* Brand fasteners, derived from the French words *velour* (velvet) and *crochet* (hooks).

VELCRO®* Brand fasteners have provided society with a practical and effective tool. Although most hook-and-loop tapes are nylon-based, there are also varieties made from plastic, stainless steel, and silver-

impregnated substances for electrical applications. Touch fasteners are used in clothing, aircraft, office equipment, and sporting and leisure equipment. They are also used in the automotive and medical industries, nuclear engineering, and NASA's space program.

National Inventors Hall of Fame Inductee Evelyn Berezin

Evelyn Berezin was an expert in logic design and data transmission. She designed one of the earliest computer reservations systems for airlines and founded a company that developed the first computerized stand-alone word processor for business use. Challenging societal norms and barriers, Berezin was often the first or only woman technologist at the companies where she worked.

Berezin joined Teleregister Corp. as the head of logic design. She and her team soon began developing a reservations system that could transmit and process data in seconds for United Airlines—at the time, the largest interconnected electronic data processing system ever built for business use. The system was structured so that problems were isolated and resolved without crippling the entire network. In 11 years of operation, the central computer never suffered a shutdown. Following this success, Berezin and three colleagues founded Redactron, where they developed the first computerized word processor.

VIDEO TRANSCRIPTS

SESSION ONE

Track: Vacation Among the Stars

Captain Water Bear Extraordinaire: Hello, down there! You are about to embark on a most exciting journey into outerspace! I am your Spacecation guide Captain Water Bear Extraordinaire! But you can call me Cap.

I'm somewhat of an expert when it comes to space...and Earth...and everywhere really. I can survive extreme hot and cold. I'm talking minus 900 degrees cold. I can live in ocean sediment, or on the tops of mountains. I could even survive on your big toe, but don't worry, you'd never know I was there.

As you can see, I am currently exploring the oxygen-less vacuum of space! And I don't even need a suit or helmet because I can use my weird, wonderful superpower, cryptobiosis, to survive! All I have to do is curl up into this dehydrated ball, and then I can live anywhere! Plus, I have these eight legs with hooked claws so I can swim, climb, spelunk, do yoga, and float through life without a care! That's where the "extraordinaire" part of my title comes from.

With the ability to go anywhere, I'm also an expert travel coordinator. Thanks to Hall of Famer Evelyn Berezin, people can coordinate all their travel using her robust reservation system. Ridiculously impressive logic design, Mrs. Berezin!

I assembled an extensive and extraordinary itinerary for your space trip through the Milky Way Galaxy. First up, we'll travel past Mars to the Asteroid Belt where we will visit the dwarf planet Ceres. Then we're off to Jupiter's moons...well two of them anyway, Europa and then Io. Jupiter has more than 70 moons, but that's a different travel package.

Then, as we make our way back to Earth, we'll stop at our Moon for a hydro-surprise-o!

Upon your arrival in space, you'll be docking your Spacecraft at the ultra-cushy, ultra-cozy, all-inclusive Wonders of Weightlessness Space Hotel!

The design of the WOW Space Hotel was actually inspired by the largest spacecraft in orbit, the International Space Station, which is the size of a football field, weighs 450 tons, and is larger than a six-bedroom house. It has laboratories, living areas, and research platforms. It even has an arm with a dexterous hand, cleverly named Dextre, to make repairs and upgrades to the outside of the space station. So, let's see, where's the front door?

Oh, over there's the docking port where visiting spacecraft attach onto the station, so astronauts can come aboard through an airlock hatch. And now for what's inside! A stellar gym, sleeping bags strapped to the wall, and everything is secured with bungee cords and hook-and-loop tape so astronauts can set stuff down without it floating away. The rest of the space station is filled with lots of computers, devices, gadgets, and handles to grab onto all over the walls and ceiling. Oh wait...there is no ceiling...or floor...no wonder astronauts go through intense training to get ready for space life!

Speaking of getting ready, I hope you're ready for the vacation of a lifetime with me, your host and tour guide Captain Water Bear Extraordinaire! See you in the stars!

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