

Welcome to the Explore Science: Earth & Space Toolkit 2020 Part B

We're so glad you're joining organizations across the country to educate and excite the public about Earth and space science content using the Explore Science: Earth & Space toolkit! In collaboration with NASA, the National Informal STEM Education Network (NISE Net) has assembled a new set of Earth and space activities and professional resources with connections to science, technology, and society. The 2020 Explore Science: Earth & Space toolkit ships in two parts this year. Part A shipped in January 2020.

COVID-19 IMPACTS

We realize COVID-19 has many implications for how we engage the public. For most of us, any kind of large-scale public event, right now, is somewhat unimaginable. We are deeply impressed and inspired by all the ways NISE Network partners are using previous toolkit activities to engage local audiences in safe, creative ways. We hope that some of these new materials will support this important work. We also look forward to a time when we can all invite our audiences to gather, explore, and learn together again. Partners have been sharing their experiences in our monthly newsletter and online workshops; you can learn more about partner's work at <https://www.nisenet.org/blog-categories/partner-highlights>.

PHYSICAL TOOLKIT CONTENTS

Included in this letter, you'll find a list of the materials contained in your 2020 Explore Science: Earth & Space Part B toolkit. The toolkit materials were designed to help partners engage participants in Earth and space phenomena, reflect on science as a way of knowing, and identify as science learners. The toolkit includes hands-on activities, professional development materials, and marketing and promotional resources. The activities work best for family audiences, with a range of experiences appropriate for participants ages four through adult. We've also included Spanish translations for all of the NISE Network educational materials, plus a bilingual promotional banner, right in the box.

COLLABORATING

We strongly encourage you to collaborate with local experts consisting of Earth and space science professionals as well as science enthusiasts in your area. Volunteer experts are a key ingredient to many successful public engagement efforts. The toolkit includes training and orientation materials to help prepare your event volunteers and staff for using the activities.

ADDITIONAL MATERIALS AND TRAINING VIDEOS ONLINE

Electronic copies of all the Explore Science: Earth & Space toolkit materials are available online. You can download these individually or as a complete digital toolkit from <http://www.nisenet.org/earthspacekit>. The website also has many other resources you can use for your Explore Science programs, including links to all of our educational programs, media, and training videos.

REPORTING AND EVALUATION

Each organization that receives a physical kit is required to complete a **single online report** describing their experiences with toolkit Part A and Part B. Toolkit recipients will be provided with a link to these online reports. We greatly appreciate your help and feedback. Kit recipients are required to submit reports by: February 1, 2021 for Part A & B of the 2020 toolkit. If you aren't able to use your toolkit before February 1st, we will still ask you to fill out a report describing future plans.

Thank you for all your efforts to engage your local audiences in Earth and space science. We look forward to learning more about how you use the toolkit throughout the year and in years to come. We couldn't do this work without you.

Explore Science: Earth & Space Toolkit Contents

Printed Materials

Planning and promotional materials

- Welcome letter + list of toolkit contents
- Adapting toolkit activities for virtual and physically distanced programs **New**
- Large promotional banners **Spanish!**
- Sample press release **Spanish!**
- Photo release form
- Sign stands
- Table cloths
- Temporary tattoos **New**

Training materials

- *Activity Overview* slides and notes printout **New**
- NASA's Solar System and Beyond Cards & Training Games **New**
- Activity facilitator guides **New**
- *SciGirls Strategies: How to Engage Girls in STEM* Booklet **New**
- *Everyone's Universe* by Noreen Grice and *Tips for Accessibility, Inclusion, and Engagement in Museums and Planetariums* **New**
- *Tips for Leading Hands-on Activities*
- *Tips for Interacting with Young Learners*

Hands-on STEM activities (complete with materials and supplies for 100 learners!)

- *Exploring the Solar System: Craters* **Spanish!**
- *Exploring the Solar System: Moonquakes* **Spanish! New**
- *Exploring the Solar System: Story Blocks* **Spanish! New**
- *Exploring the Solar System: Moon Observation* (guide & tools) **Spanish! New**
- *Exploring Science Practice Skills: Measure Up* **Spanish! Early Childhood New**

Moon Adventure Game

The Moon Adventure Game is designed as an in-person, hands-on collaborative experience for 3–6 participants with support from a museum educator or volunteer facilitating the game. Players will work together to solve a series of challenges grounded in real science about living and doing research on the Moon. **Spanish! New**

- Getting Started Kit (including the Moon Adventure Game Guide)
- Challenges 1–5
- Assembly and Repair Materials



Media and Graphics

- NASA LRO Lithograph: *Observing the Moon*
- NASA LRO Lithograph: *Detailed Topography of the Moon*
- *Getting a Feel for Lunar Crates: Apollo 50th Commemorative Edition* tactile book
- *Mars Exploration* tactile book
- *A Tactile Guide to the Solar System* tactile book
- *Touch the Stars* tactile book
- *3D Printed image of the Lunar South Pole*

Explore Science: Earth & Space Toolkit Contents

Digital Kit (on www.nisenet.org)

Planning and promotional materials

- Welcome letter + list of toolkit contents
- COVID-19 programming ideas and promotional supplement **New**
- *2020 Planning, Partnership, and Program Guide*
- Large promotional banners **Spanish!**
- Sample press release **Spanish!**
- Photo release form
- Digital copies of all promotional materials including signs, photos, ads, and posters **New**

Training materials

- *Activity Overview* presentation **New**
- NASA's Solar System and Beyond Cards & Training Games **New**
- Activity facilitator guides **New**
- *Tips for Leading Hands-on Activities*
- *Tips for Interacting with Young Learners*
- *Tips for Accessibility, Inclusion, and Engagement in Museums and Planetariums* **New**
- Activity and content training videos for each activity and the Moon Adventure Game
Available online: <https://vimeo.com/nisenet/explore-science-earth-space>

Hands-on STEM activities

- Digital copies of all activity and game guides and graphics **New Spanish!**