



## EXPLORE SCIENCE

# Earth & Space

### Welcome to the Explore Science: Earth & Space Toolkit

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.

#### PHYSICAL TOOLKIT CONTENTS

On the backside of this letter, you'll find a list of the materials contained in your 2020 Explore Science: Earth & Space Part A 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.

The 2020 Explore Science: Earth & Space toolkit will ship in two parts this year. Part B will ship in August 2020 and will include a hands-on collaborative Moon game as well as science activities about the Moon.

#### 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 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. You can also learn more about upcoming online workshops at <http://www.nisenet.org/events/online-workshop>.

#### REPORTING AND EVALUATION

Each organization that receives a physical kit is required to complete **two online reports** 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:**

**June 15, 2020** for Part A of the 2020 toolkit

**February 1, 2021** for Part B of the 2020 toolkit (this will be a shorter report)

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 during events and throughout the year!

*The NISE Network Explore Science toolkit team*

# Explore Science: Earth & Space Toolkit Contents

## Printed Materials

### Planning and promotional materials

- Welcome letter + list of toolkit contents
- *2020 Planning, Partnership, and Program Guide* **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**
- Activity facilitator guides **New**
- *Tips for Leading Hands-on Activities*
- *Tips for Interacting with Young Learners* **New**
- National Park Service Junior Ranger Night Explorer Booklets & Badges **New**

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

- *Exploring Earth: Bear's Shadow* **Spanish! Early Childhood**
- *Exploring Earth: Investigating Clouds* **Spanish!**
- *Exploring the Solar System: Asteroid Mining* **New Spanish!**
- *Exploring the Solar System: Design, Build, Test* **New Spanish!**
- *Exploring the Solar System: Mission to Space* **New Spanish! Game**
- *Exploring the Universe: Nebula Spin Art* **New Spanish!**
- *Exploring the Universe: Orbiting Objects* **Spanish!**
- *Exploring the Universe: Star Formation* **New Spanish!**
- *Exploring the Universe: Space Guess Quest* **Spanish! Game**
  - *Objects in Our Universe* poster **Spanish!**
- *Exploring Science Practice Skills: Early Explorations* **New Spanish! Early Childhood**

### Media and graphics

- *Elementary GLOBE™ Do You Know The Clouds Have Names?* book **New**
- *GLOBE™ Observer Zika Zine* **New Spanish!**
- Complete set of NASA's JPL Exoplanet Travel posters

## Digital Kit (on USB thumb drive)

### Planning and promotional materials

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

### Training materials

- *Activity Overview* presentation **New**
- Activity facilitator guides **New**
- *Tips for Leading Hands-on Activities*
- *Tips for Interacting with Young Learners* **New**
- Activity and content training videos for each activity, included in your kit and also online: <https://vimeo.com/nisenet/explore-science-earth-space>

### Hands-on STEM activities

- Digital copies of all activity guides and graphics **New Spanish!**
- *Engineering is Elementary* afterschool modules
  - *Worlds Apart: Engineering Remote Sensing Devices*, included in your kit and also online: <https://www.eie.org/engineering-everywhere/curriculum-units/worlds-apart>
  - *Testing the Waters: Engineering a Water Reuse Process*, included in your kit and also online: <https://www.eie.org/engineering-everywhere/curriculum-units/testing-waters>