

NISE

NATIONAL INFORMAL
STEM EDUCATION
NETWORK



WELCOME

NISE Network Partner Breakfast
ASTC 2017

Agenda

Presentation

Network overview
Current projects
Year in review

Discussion

Future directions



NISE NETWORK

NISE Net is the National Informal STEM Education Network.



NISE Net supports **informal learning about STEM** in communities across the United States.



The Network engages **all audiences** in learning about STEM in ways that are fun and accessible.



NISE Net improves the **practices and skills** of educators and scientists.



NISE Net seeks to **broaden participation** in STEM learning—at home, at school, and in the community.



Together we reach **millions of people** each year!



Network **projects** leverage the relationships and infrastructure we have built.



Our projects tackle **challenging problems** and develop relevant knowledge, tools, and practices.



Network partners use project resources to **engage local audiences** in many different ways.



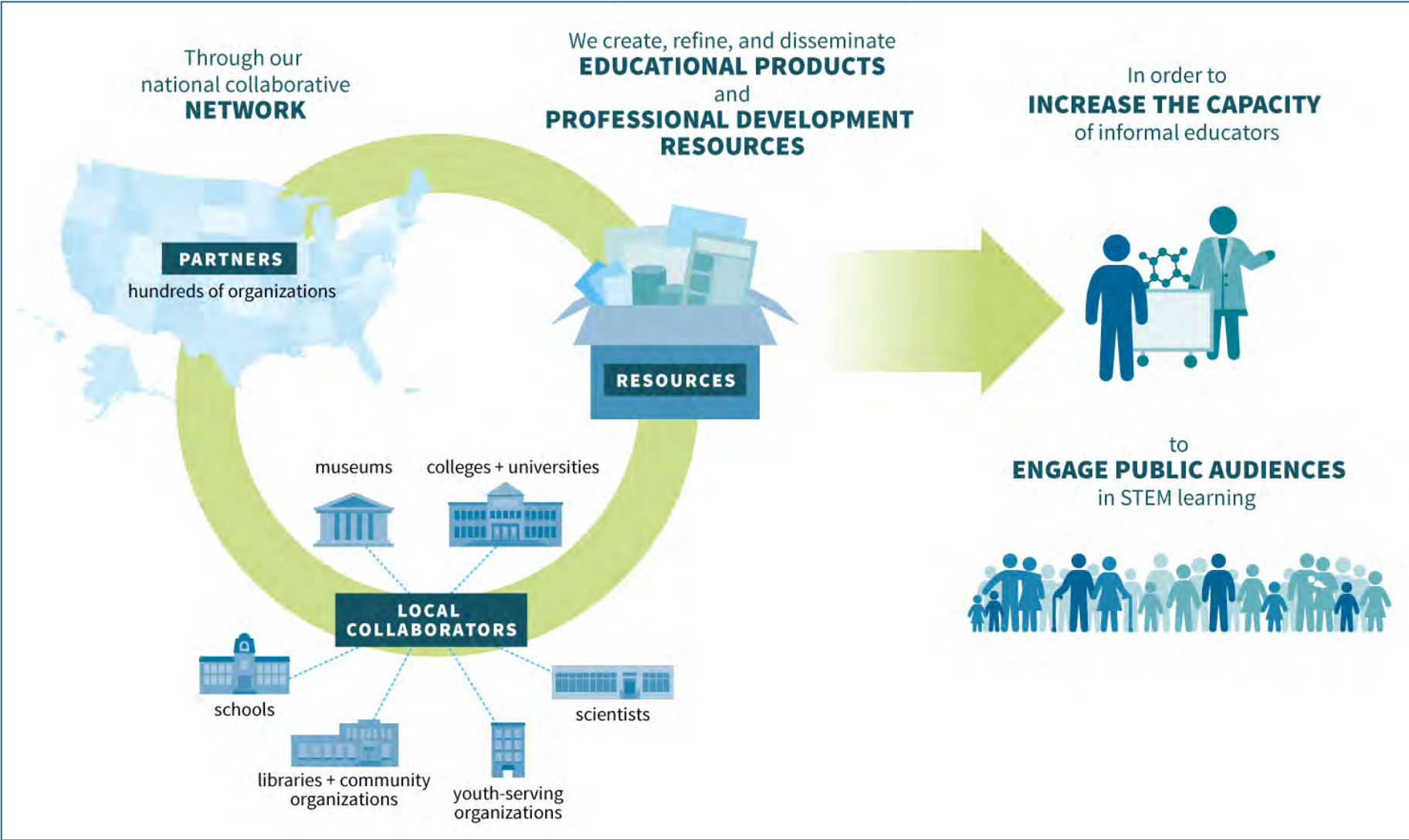
Partners **adapt and improve** our resources, creating new ideas, learning, and models.



Partners share their **innovations across the Network** through in-person and online gatherings.



NISE Net advances the field of informal learning and empowers communities across the country.



Professionals from **diverse organizations** lead the Network.

LEADERSHIP

R. Ostman, Arizona State University (Director)
L. Bell, Museum of Science
P. Martin, Arizona State University
M. Benne, Oregon Museum of Science & Industry
I. Bennett, Arizona State University
M. Dahlager, Science Museum of Minnesota
J. Das, The Franklin Institute
E. Kollmann, Museum of Science
M. Kortenaar, Sciencenter
C. McCarthy, Science Museum of Minnesota
K. Ostfeld, Children's Museum of Houston
C. McCallum, Children's Museum of Houston
D. Porcello, University of California Berkeley
D. Sittenfeld, Museum of Science
R. Vandiver, Tulsa Children's Museum
J. Wetmore, Arizona State University

REGIONAL HUBS

B. Herring, Museum of Life + Science
A. Jackson, Sciencenter
F. Kusiak, University of California Berkeley
C. Leavell, Science Museum of Minnesota

ADVISORS

M. Ballard, Afterschool Alliance
J. Bell, CAISE
L. Huerta Migus, Association of Children's Museums
K. Peterson, National Girls Collaborative Project

PROJECTS



Space & Earth Informal STEM Education (SEISE)

Creating authentic STEM learning experiences that connect learners to NASA content and experts



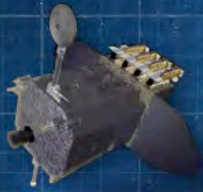
Space & Earth Informal STEM Education (SEISE)

250 toolkits with hands-on activities and professional resources

Toolkit applications due on November 1, 2017

SUN EARTH
UNIVERSE

SOL TIERRA
UNIVERSO



SDO
Solar Dynamics
Observatory
Observatorio
de la Dinámica Solar

THE SUN OUR STAR

The Sun is a dynamic star. It has brilliant solar flares, explosive coronal mass ejections, and fiery prominences whipping hundreds of thousands of kilometers into space. By observing the Sun's turbulent atmosphere, the orbiting Solar Dynamics Observatory helps us understand the ways our star affects life on Earth.

EL SOL NUESTRA ESTRELLA

El Sol es una estrella dinámica. Tiene brillantes bengalas solares, eyecciones explosivas de masa coronal, y prominencias ardientes que azotan cientos de miles de kilómetros en el espacio. Al observar la atmósfera turbulenta del Sol, el Observatorio de la Dinámica Solar nos ayuda a comprender las formas en que nuestra estrella afecta la vida en la Tierra.

Light from the Sun takes
about **8 MINUTES** to reach Earth.
La luz del Sol tarda
unos **8 MINUTOS** en llegar a la Tierra.

This image captures the Sun in
spectrum **ULTRAVIOLET LIGHT**.
This may be too bright and hard to
control for the naked eye.

This image captures the Sun in
LUZ ULTRAVIOLETA spectrum.
Este espectro puede resultar
demasiado brillante para verse.

THE CORONA LOOKS SOFT
but is made of extremely hot gas.
**LA CORONA DEL SOL PARECE
SUAVE** pero está hecha de gas
extremadamente caliente.

The Sun is approximately
4.5 BILLION YEARS OLD.
It will continue to burn for about
8 billion more years.

El Sol tiene aproximadamente
4.5 BILLONES DE AÑOS.
Seguirá ardiendo durante unos
8 mil millones más de años.

The Sun makes up about
99.86% of the total mass
of our solar system.
El Sol representa aproximadamente
el **99.86%** de la masa total
de nuestro sistema solar.



Space & Earth Informal STEM Education (SEISE)

50 small-footprint exhibitions

More information and
applications in early 2018

Building with Biology

Bringing researchers and public audiences together to talk about synthetic biology through hands-on activities and public forums



Building with Biology

Public forum on editing the human genome available fall 2018 on nisenet.org





Frankenstein200

Studying transmedia learning that occurs across hands-on activities, immersive digital games, and online challenges



Frankenstein200

Digital kit available at
nisenet.org/frankensteinkit

Alternate reality game and
more activities January, 2018 at
frankenstein200.org

Instructables contest May, 2018
at instructables.com/contest

ChemAttitudes

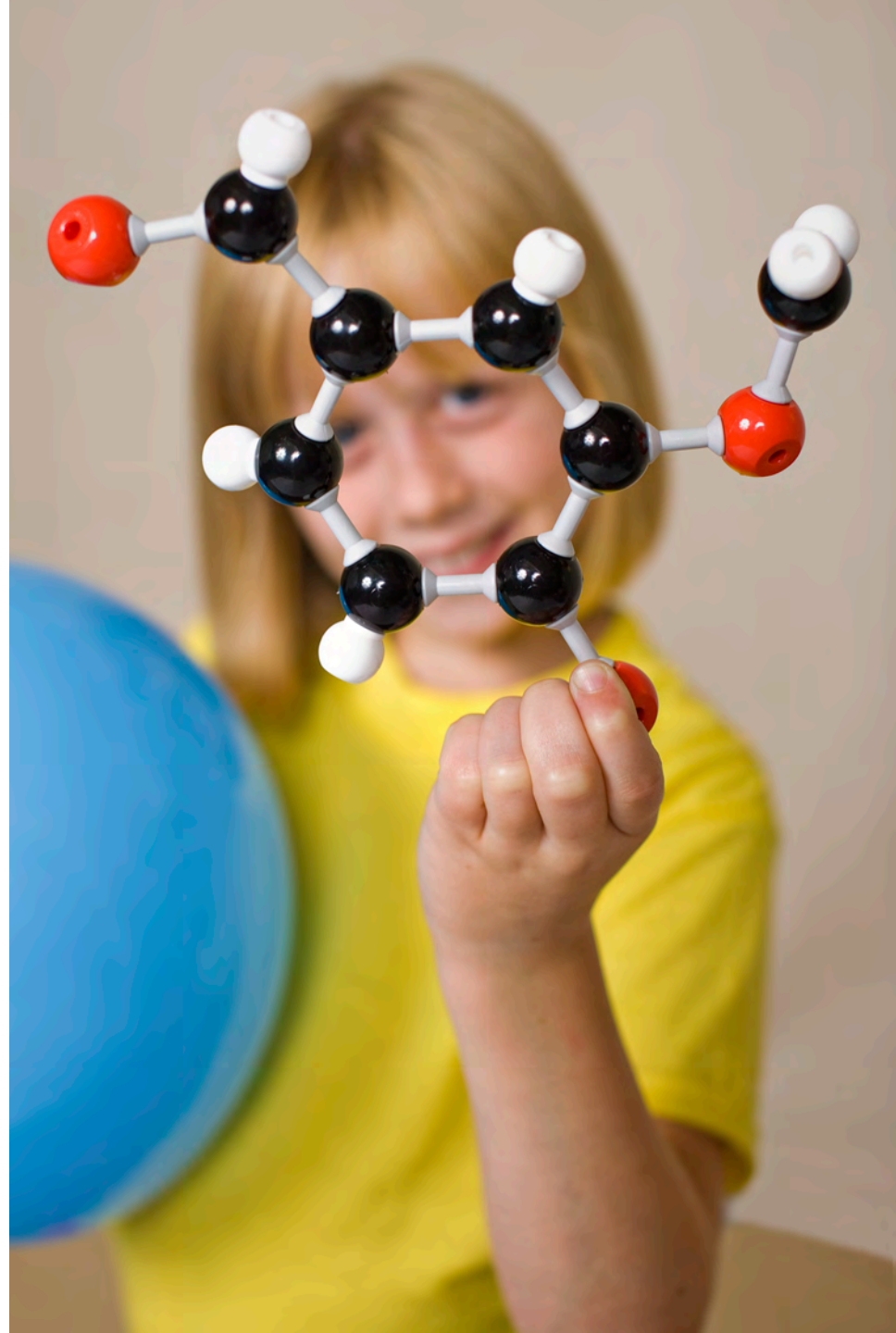
Investigating design principles and facilitation techniques that support learners' interest, relevance, and self-efficacy in chemistry



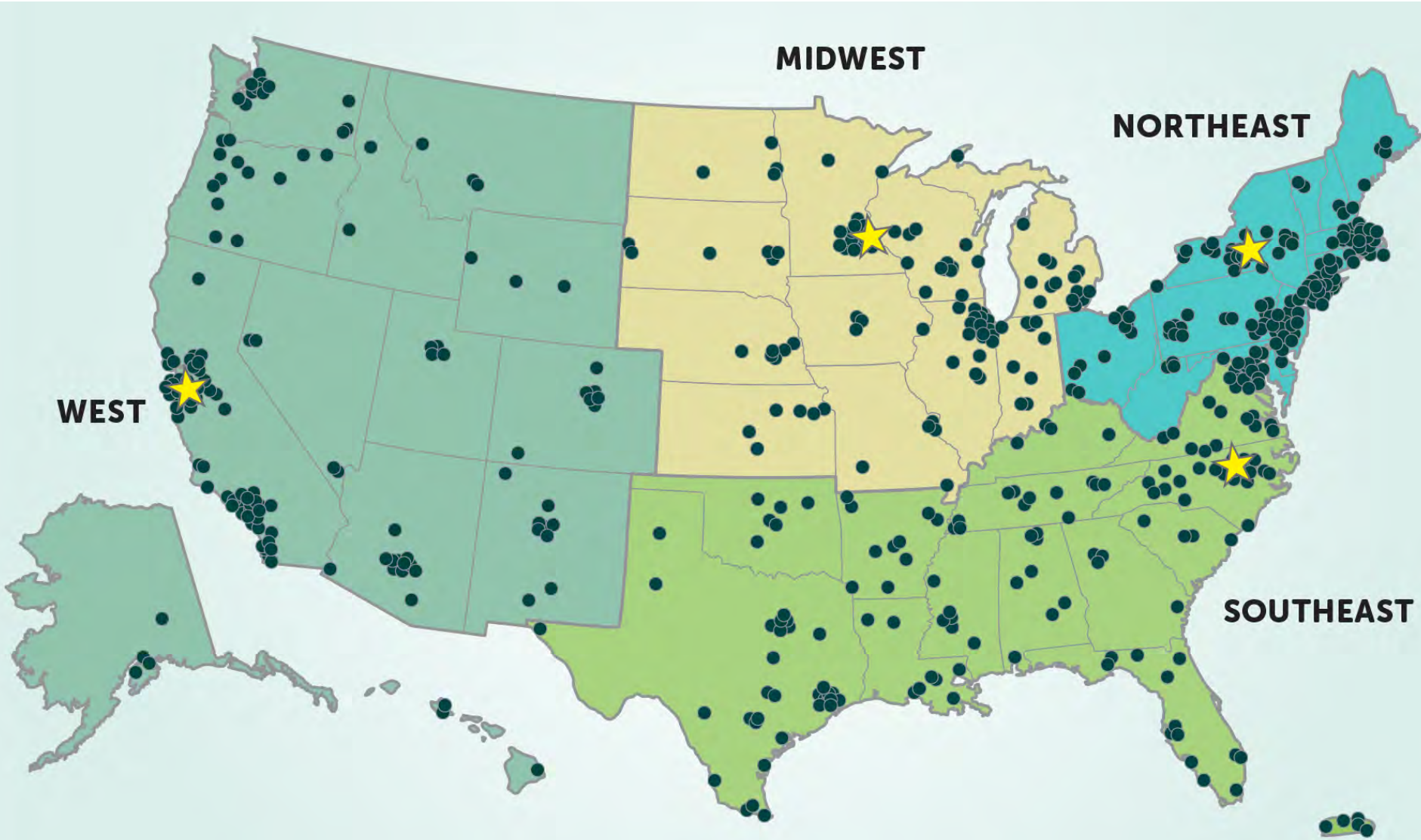
ChemAttitudes

250 kits with hands-on activities
and professional resources

Applications due around June 1,
2018



For these and other opportunities, **regional hub leaders** are your connection to the Network!



YEAR IN REVIEW



5

active Network projects and dissemination partnerships



50,000,000+

people reached through the Nano project



2,700+

professionals participated in
the Nano project



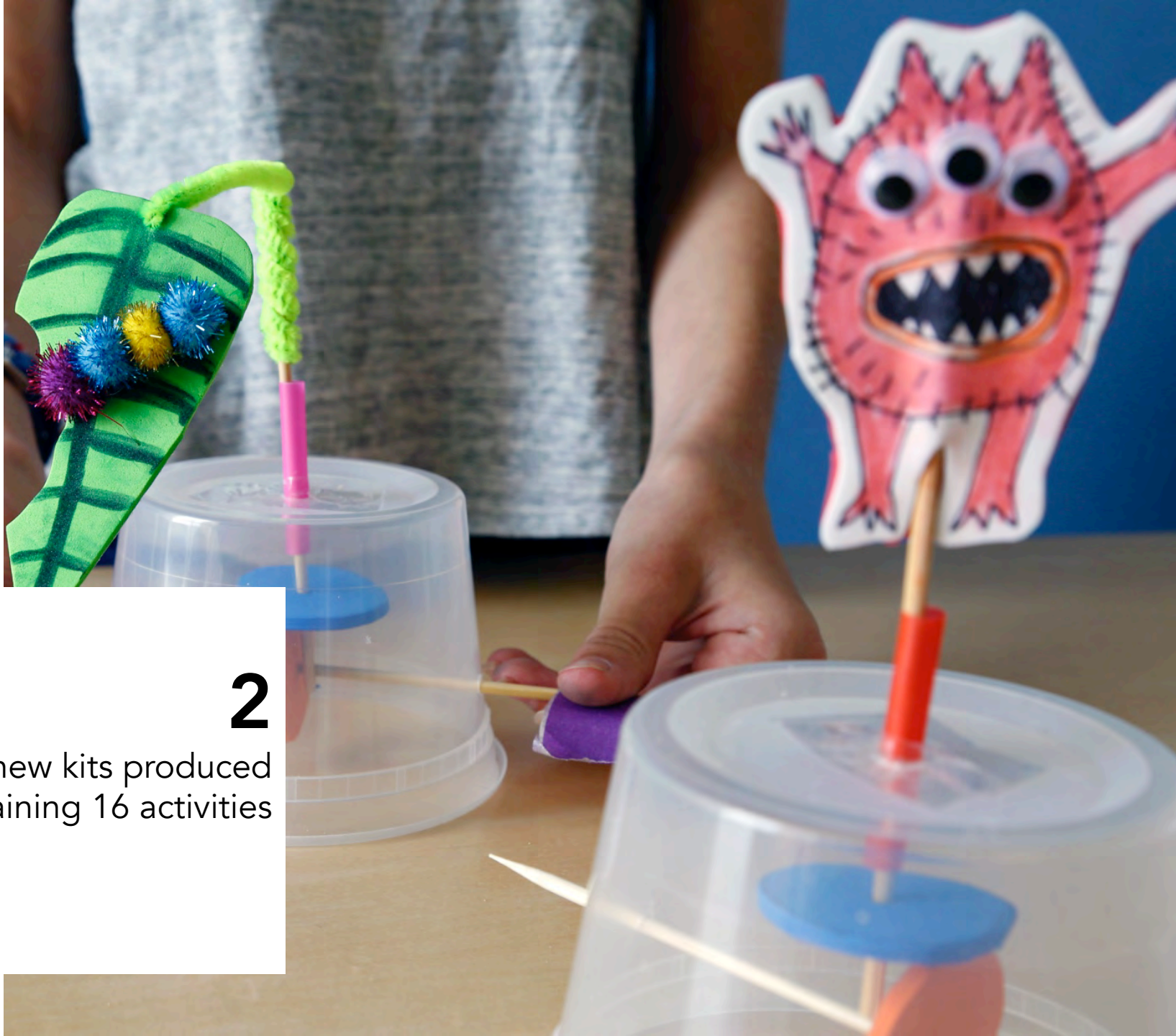
350

organizations participated in
new Network projects



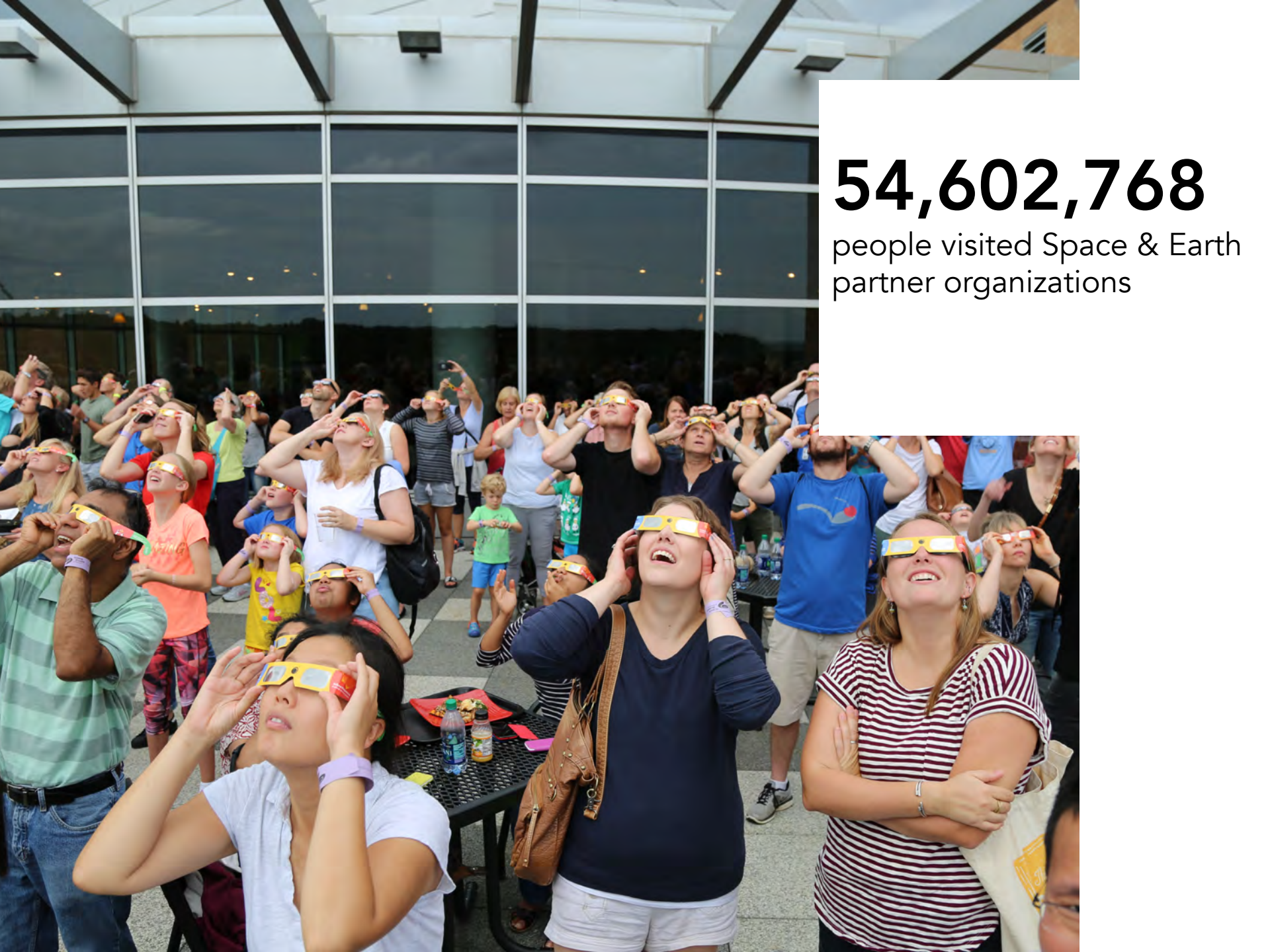
50

states with active
Network partners



2

new kits produced
containing 16 activities



54,602,768

people visited Space & Earth
partner organizations



85%

of partners reached underserved audiences through Space & Earth events



5+

new project ideas
under development

DISCUSSION

Possible future directions

Brain and neuroscience
Civic engagement
Climate resilience
Engaging rural audiences

What else are you interested in doing through the Network?

Discuss at your table!

*Please jot notes on the cards
and leave them for us.*



Thank you



The **Nanoscale Informal Science Education Network** is supported by the National Science Foundation under award numbers 0532536 and 0940143. **Multi-Site Public Engagement in Science** is supported by the National Science Foundation under award number 1421179. **Increasing Learning and Efficacy** is supported by the National Science Foundation under award number 1516684. **ChemAttitudes** is supported by the National Science Foundation under award number 1612482. Any opinions, findings, and conclusions or recommendations expressed in this presentation are those of the authors and do not necessarily reflect the views of the Foundation.



Space and Earth Informal STEM Education is supported by NASA under cooperative agreement number NNX16AC67A. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the view of the National Aeronautics and Space Administration (NASA).

