

Level Up Your Facilitation and be a "Guide on the Side" for Virtual and In-Person STEAM Programs

October 22, 2020; 1:00 pm MT

1) Please introduce yourself in the chat. You won't have microphone access for today's webinar.

2) You can find today's "Link Bank" at: starnetlibraries.org/blog

Call-in Number: US: +1 346 248 7799 or +1 408 638 0968 or +1 669 900 6833 or +1 253 215 8782 or +1 646 876 9923 or +1 301 715 8592 or +1 312 626 6799

NASA@ My Library

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Facilitator Introduction

- Keliann LaConte
- Brooks Mitchell
- Claire Ratcliffe

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NCIL

National Center for
Interactive Learning



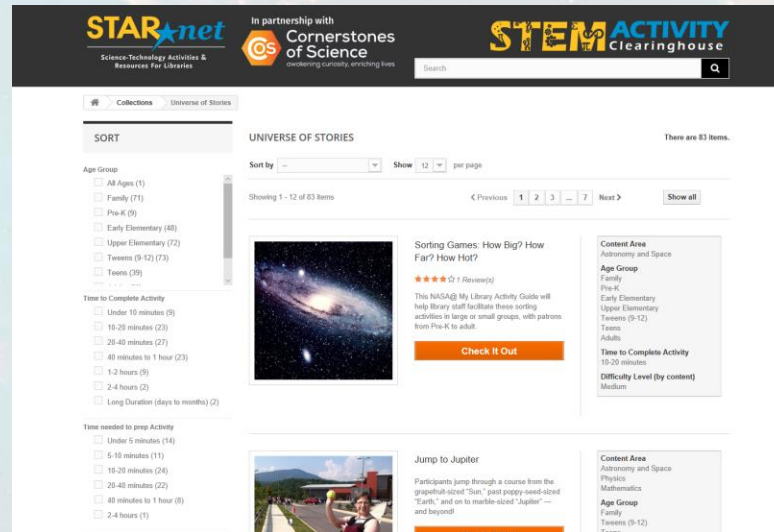
**SPACE
SCIENCE**
INSTITUTE

NASA@
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STAR★**net**

Science-Technology Activities &
Resources For Libraries

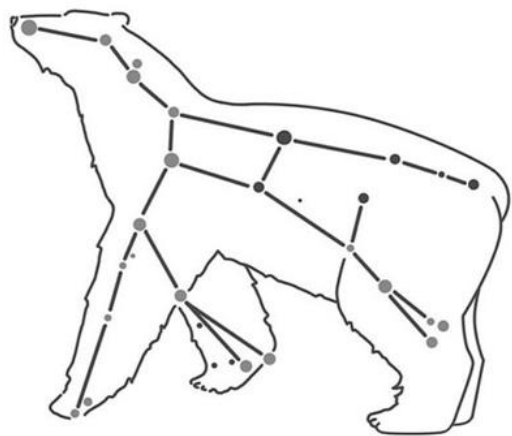
STEM ACTIVITY Clearinghouse



Like an activity and think other library staff should know how great it is? Didn't like an activity or have modifications to make it better? [Make sure to leave a review!](#)

Virtual Programs

Use this featured resource to add easy, hands-on STEAM activities (using common household materials) to your online Story Time programs. Note: Book recommendations are included.



Virtual Program: Sky Heroes

Participants celebrate their heroes by creating connect-the-dot star patterns to represent them.

[View This Virtual Program Activity](#)

Families at Home

Below is a set of resources that can be provided directly to families without the need of facilitation by library staff.



Hands-on Activity: Daylight in a Bottle

Celebrate Earth Day at home by harnessing the power of natural resources! This [family guide](#) explores how you can read a secret message from a friend or light up a room with just two things: free, clean energy from the Sun and a water bottle.

The activity has a how-to video (below) as well as a short, four minute video, "[A Liter of Light @ Night](#)", showing how this technology has been used practically in other countries.

[View The Facilitation Guide](#)

Refresh Your Skills

Keep your skills sharp by revisiting these professional development resources.

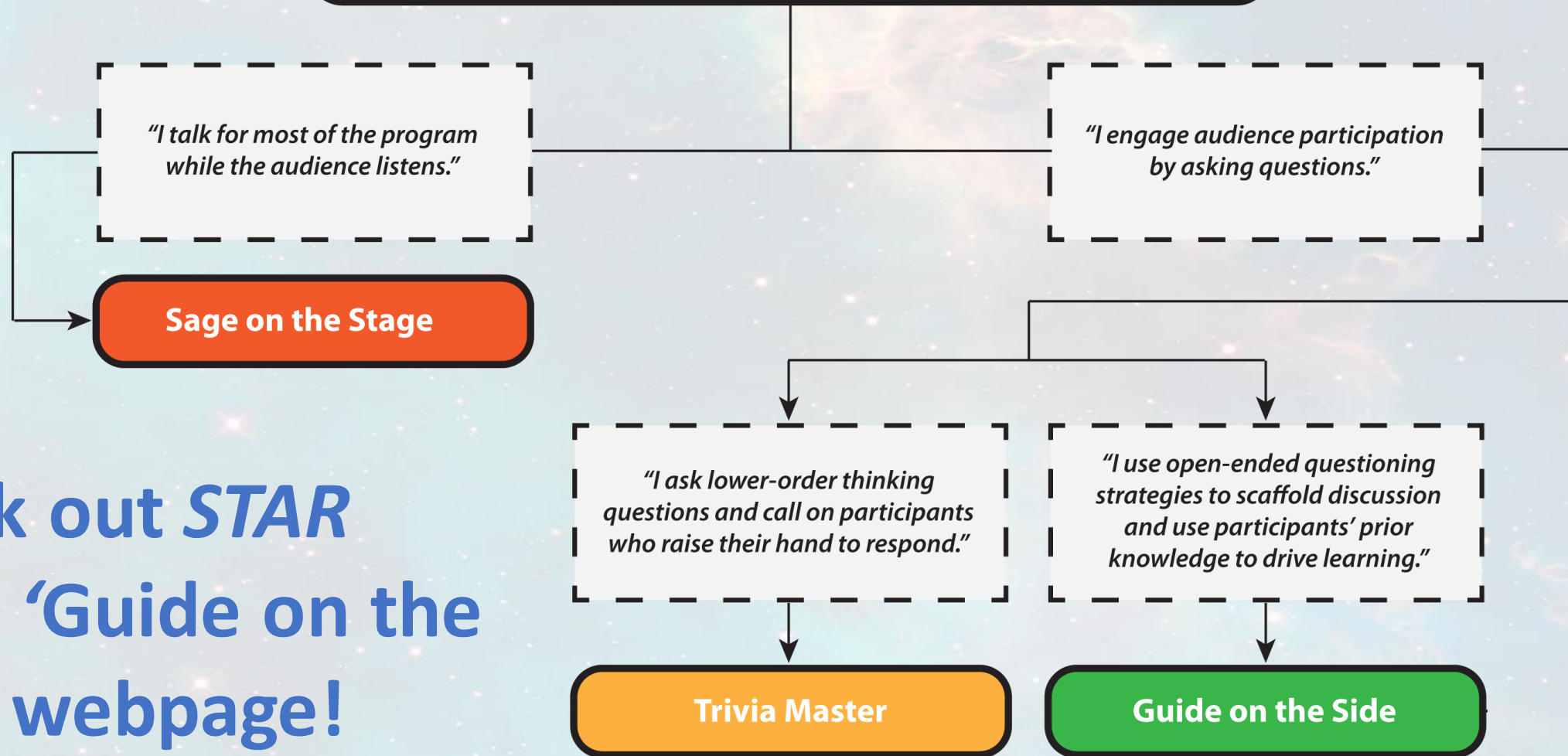


Webinar: Imagine Your Story... with a **STEAM** Twist!

Join the *STAR Net* team and Luke Kralik, Organizational Coordinator for CSLP, in this recorded webinar to learn all about this year's theme and exciting, hands-on **STEAM** activities that will help you bring it to life at your library. We'll discuss programming ideas, useful resources, and tips for engaging your community!

[View This Week's Webinar](#)

What Facilitation Style Do You Use?



Check out *STAR*
Net's 'Guide on the
Side' webpage!

<http://www.starnetlibraries.org/resources/guide-on-the-side/>

STEAM Learning in Public Libraries: A “Guide on the Side” Approach for Inclusive Learning

Authored by Brooks Mitchell, Claire Ratcliffe, and Keliann LaConte

Association for Library Service to Children’s (ALSC) *Children and Libraries* journal; Vol 18, No 3 (2020)

STEAM Learning in Public Libraries

A “Guide on the Side” Approach for Inclusive Learning

BROOKS MITCHELL, CLAIRE RATCLIFFE, AND KELIANN LACONTE



STEAM learning at Tom Greene County Library in San Angelo, Texas.

journals.ala.org/index.php/cal/issue/view/773

Or

bit.ly/2TdWcgK

IdeaBoardz Question (pt. 1):

bit.ly/31v6T2M

What is the best part about
Fall?

IdeaBoardz Question (pt. 2):

<https://bit.ly/2HoD3q2>

What “STEAM” connections
can you think of for the Fall
season?

Open-Ended Question

What is a “STEAM” learning experience in your life that really stands out and/or had a big impact?

- Reflective question. Can share in chat if you want to.
- (Keep this in mind as we are going through STEAM Facilitation Pathways!)

Agenda Overview

- ~~Intro/Icebreaker~~
- STEAM Learning Pathways
- Guide on the Side “Moves”
- Activity
- Poll/Discussion



Learning Expectations

Begin with 'Guide on the Side'
philosophy and end with discussion

We are not library staff; we are counting
on you all to share your experience!



Facilitation Styles



Illustration by Kevan Mills. Credit: Space Science Institute



“Sage on the Stage”

- Focus is on the instructor
- Delivers a lecture
- Audience as passive listeners



The Earth and the Moon



Illustration by Kevan Mills. Credit: Space Science Institute

“Trivia Master” (or Initiation-Response-Evaluation)



Illustration by Kevan Mills. Credit: Space Science Institute

Facilitators

Ask closed questions

Control discussion

Do majority of talking

Patrons

Recall, list, recite, label

Rewarded for “correct”
answers



Credit: NASA's Scientific Visualization Studio

exploration



A close-up photograph of a woman with long brown hair and a young girl with blonde hair tied in a ponytail. They are both looking down at a small, purple and white object held in the woman's hand. The woman is wearing a colorful, patterned shirt. The girl is wearing a pink shirt with small white dots. The background is blurred, showing other people in a room.

inquiry

Credit: Muhlenberg Community Library

creativity



Credit: Prince George's County Memorial Library System

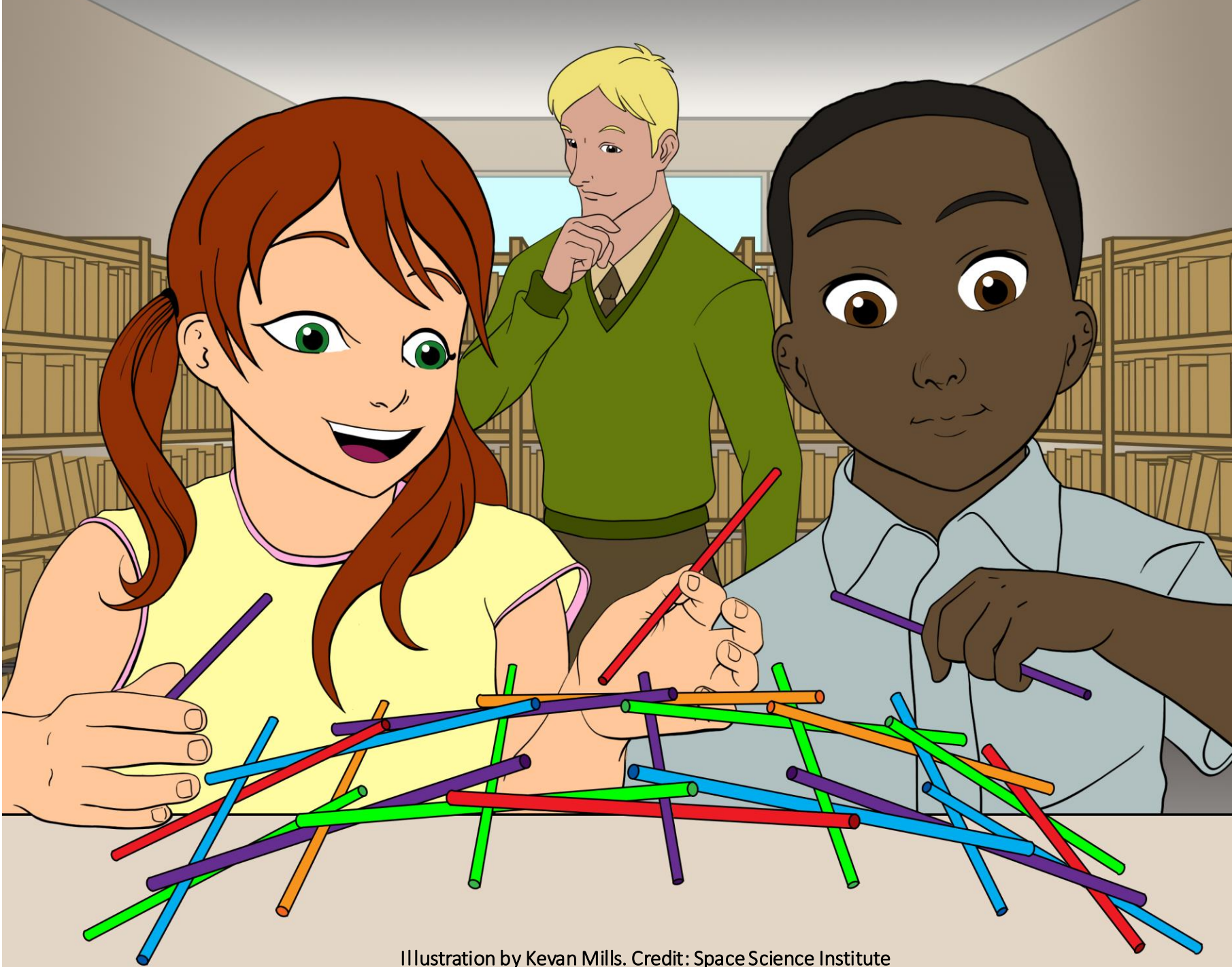
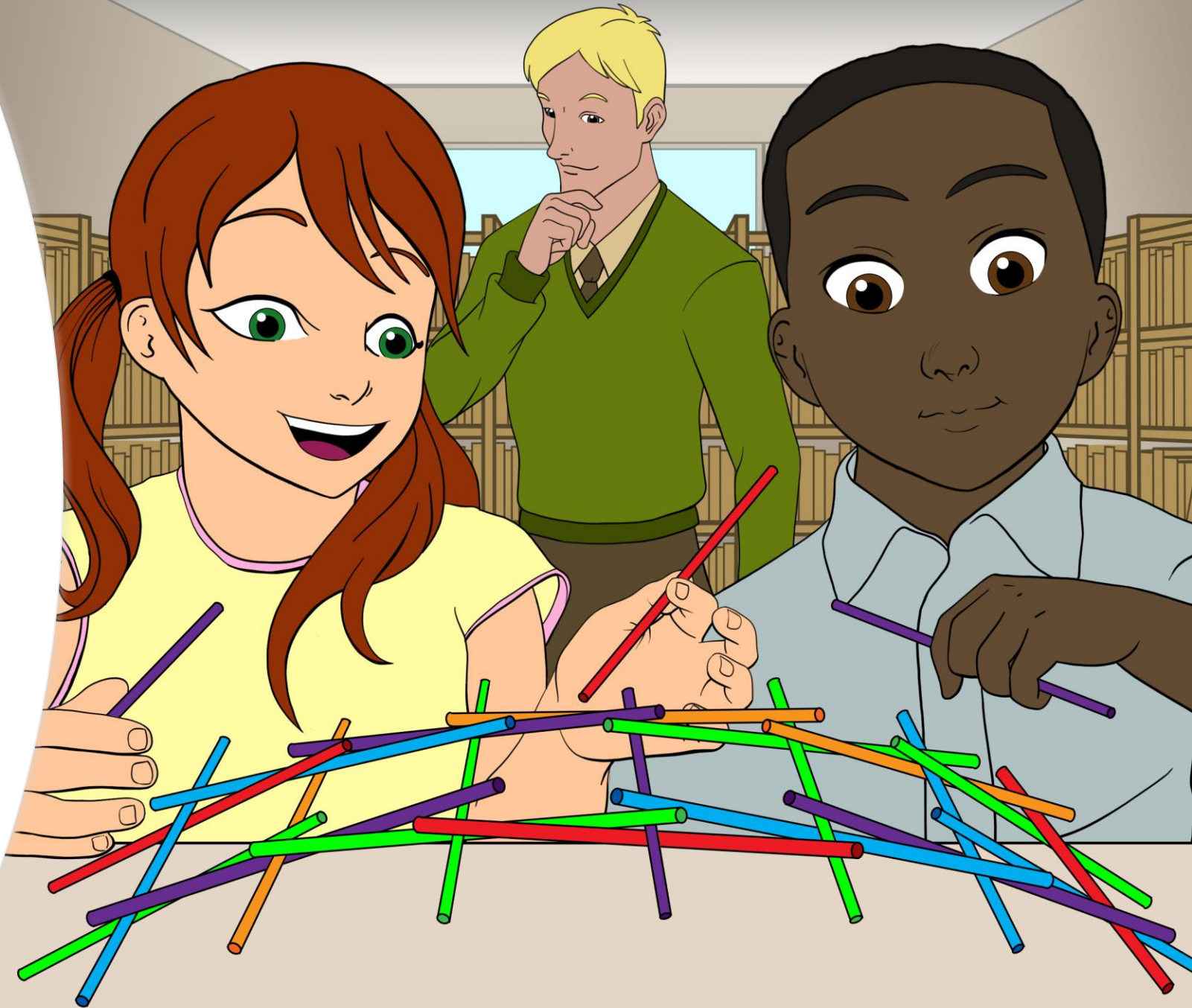


Illustration by Kevan Mills. Credit: Space Science Institute

“Guide on the Side”



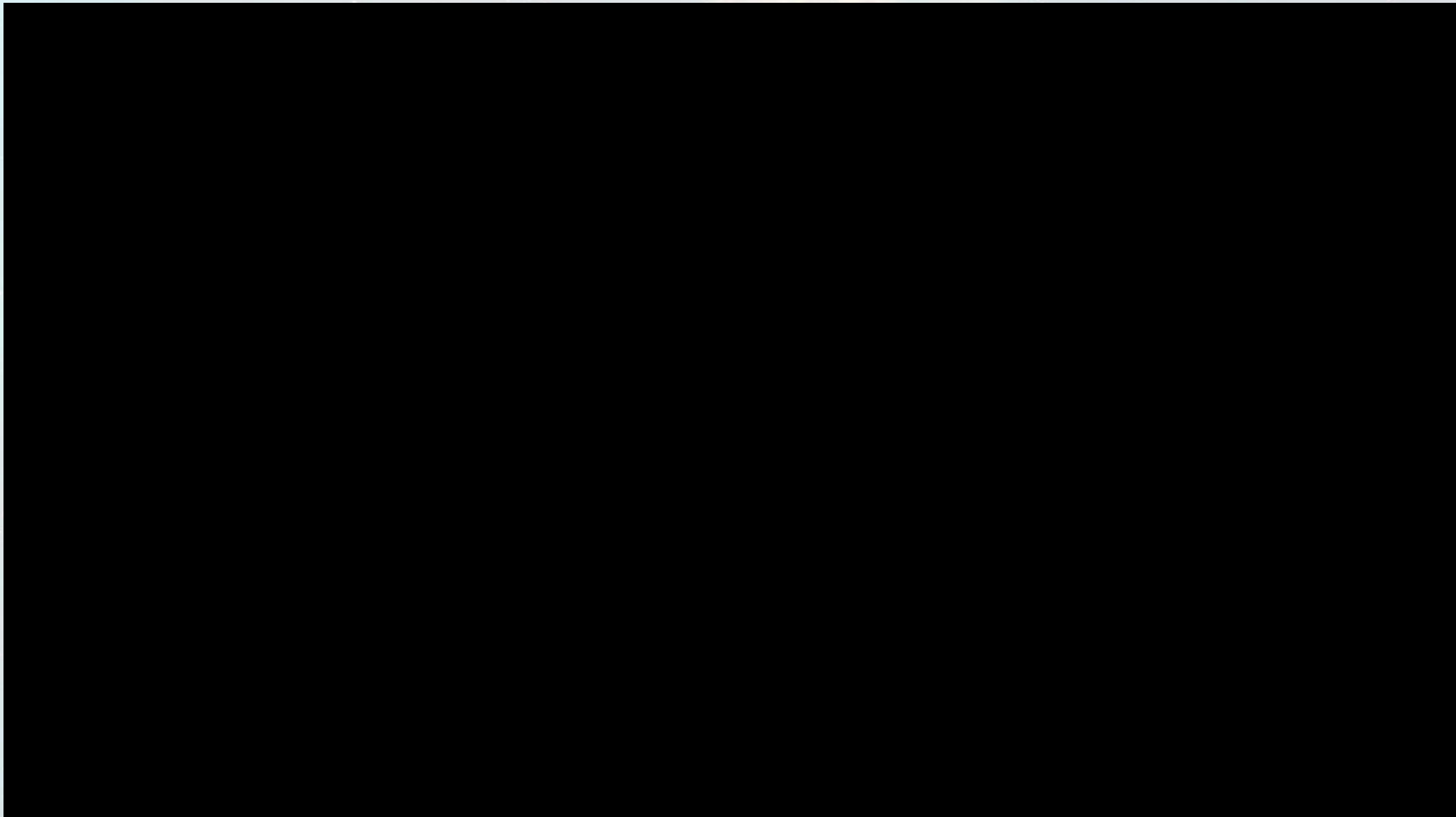


Credit: Space Science Institute/African-American Research Library and Cultural Center





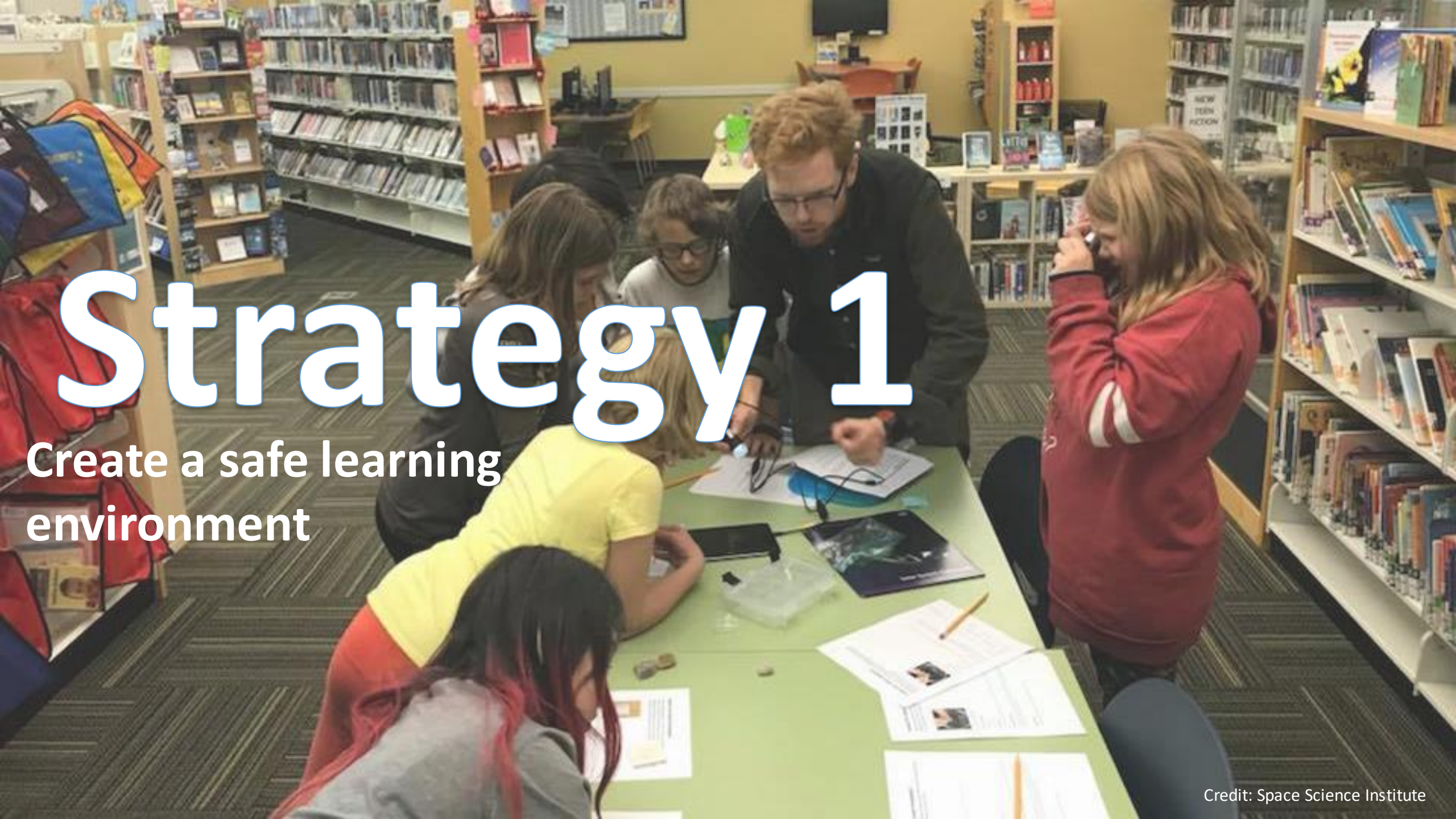
Credit: Space Science Institute/High Plains Library District





Credit: Space Science

“Guide on the Side” Strategies for Your STEM Programs

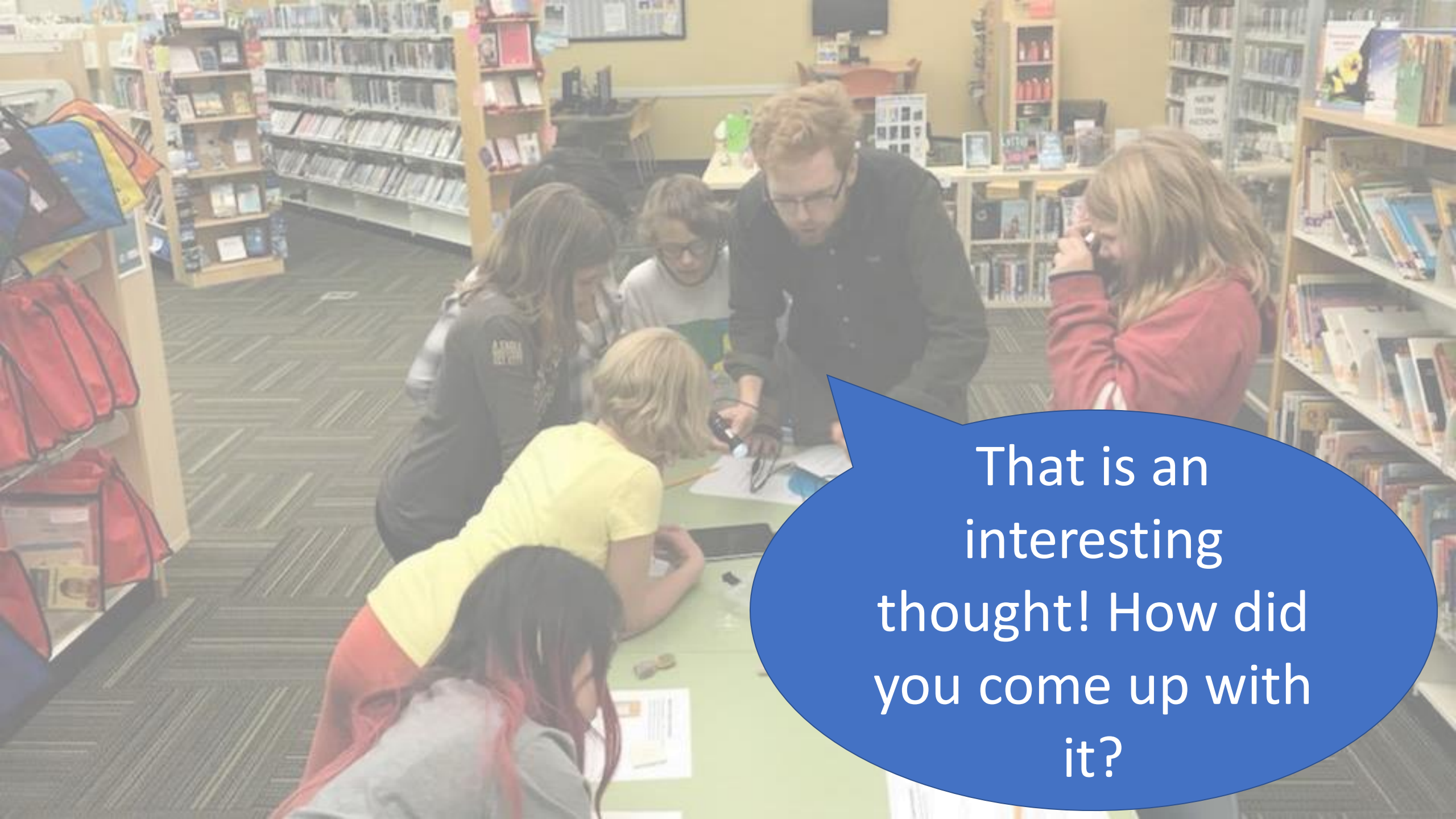


Strategy 1

Create a safe learning environment

I don't
know...let's find
out together!





That is an
interesting
thought! How did
you come up with
it?



Open-ended questions

Strategy 2

What do you notice?
Can you tell me
more?



Strategy 3













What did you observe?



Wait Time

Wait approximately 5 seconds after asking a question.

Respond to someone who took longer to form his or her thoughts.


Gives time for learners to think about and articulate their ideas.





Strategy 4

“Turn and Talk”

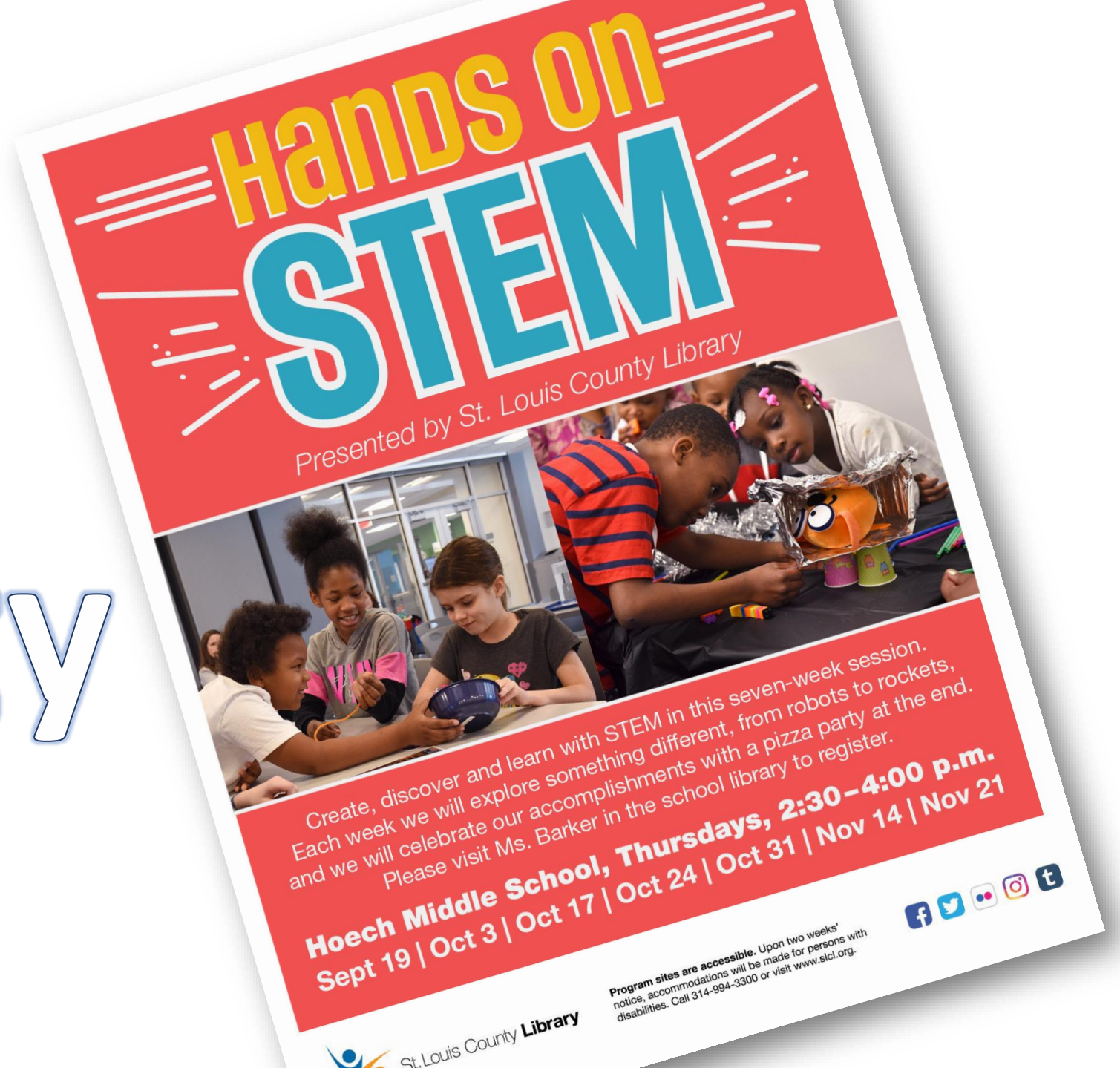


Please turn and tell your
family member or friend
your ideas.



“Help each other figure this out. Take your time. I will come back in a few minutes to see how you’re doing.”

Strategy 5

A poster for the 'Hands on STEM' program. The title 'Hands on STEM' is at the top in large, bold, yellow and blue letters with white outlines and radiating lines. Below it, 'Presented by St. Louis County Library' is written in white. A central photograph shows four diverse children working together on a project, with one child holding a blue bowl. The bottom section of the poster contains text about a seven-week session, dates, and times, along with social media icons and accessibility information.

Hands on STEM

Presented by St. Louis County Library

Create, discover and learn with STEM in this seven-week session. Each week we will explore something different, from robots to rockets, and we will celebrate our accomplishments with a pizza party at the end. Please visit Ms. Barker in the school library to register.

Hoech Middle School, Thursdays, 2:30–4:00 p.m.
Sept 19 | Oct 3 | Oct 17 | Oct 24 | Oct 31 | Nov 14 | Nov 21

Program sites are accessible. Upon two weeks' notice, accommodations will be made for persons with disabilities. Call 314-994-3300 or visit www.slcl.org.

St. Louis County Library

f t i s t

STEM

ACTIVITY

Clearinghouse

clearinghouse.starnetlibraries.org

Strategy

6

Find common and
shared experiences for
patrons



Credit: Space Science Institute



Exploring the Scale of Our Solar System

[Earth's Bright Neighbor](#)





**grape
or blueberry**



peppercorn



**grape
or blueberry**

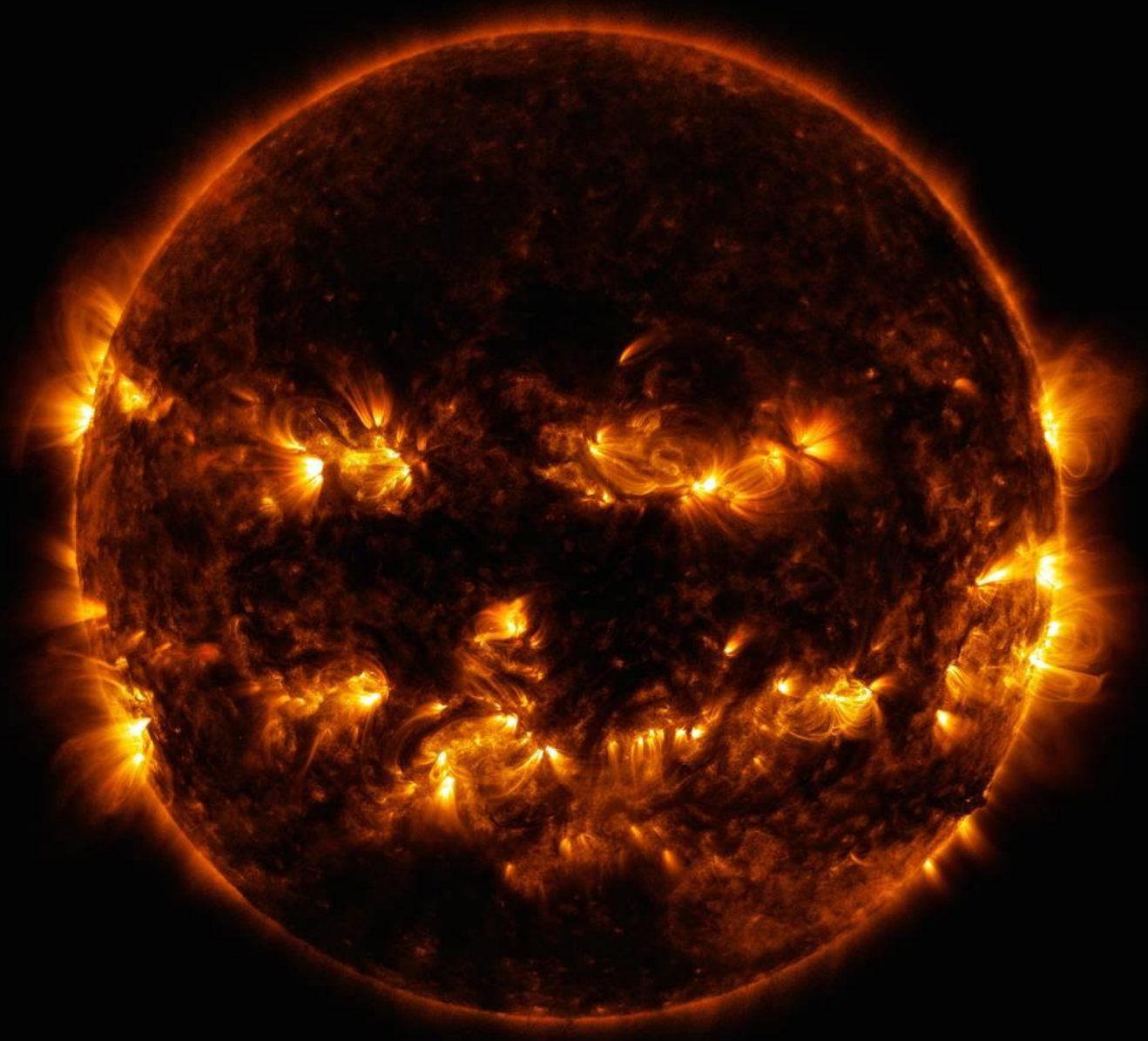
15 inches (38 cm)



peppercorn



Giant pumpkin
(or Halloween orange pumpkin garbage bag)
55 inches wide



Earth-Sun
Distance:
491 ft or 150 m



150.27 m



Wyoming Circuit
Court, Albany County...

Albany County Public
Library - Laramie

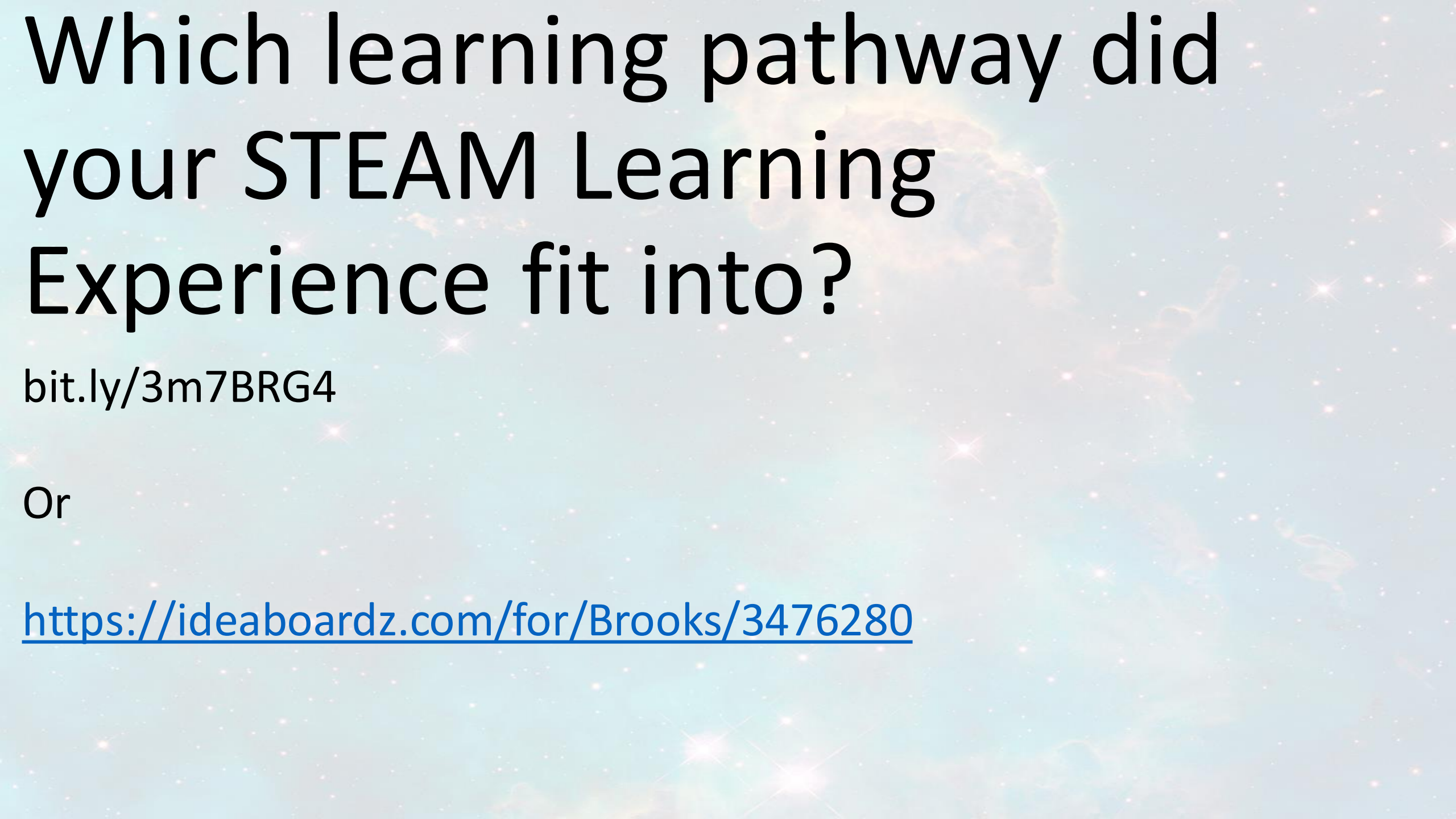
Islamic Center of Laramie

Google 100%

Camera: 2,602 m 41°18'41"N 105°35'14"W 2,185 m

Credit: Google Earth





Which learning pathway did your STEAM Learning Experience fit into?

bit.ly/3m7BRG4

Or

<https://ideaboardz.com/for/Brooks/3476280>

Discussion

In what ways are you already using *Guide on the Side* strategies for your library programs?

Discussion

How can you be a Guide on the Side with virtual programs?

What ideas, suggestions, or tips do you have to increase interactivity?

Discussion

What ideas do you have for incorporating art into your virtual STEAM programs?

The background of the slide is a deep space image. It features a large, glowing nebula in the upper right quadrant, with colors ranging from pale yellow to light blue. The rest of the background is a dark, teal-colored void filled with numerous small, bright stars, some of which have prominent four-pointed diffraction patterns.

Thank you!

Any questions?