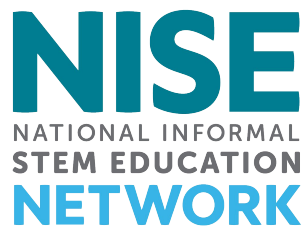


Earth & Space Project-Based Professional Learning Community



Making Explore Science: Earth & Space toolkit activities more relevant

Recorded in January 2022 as part of the Earth & Space Project-Based Professional Learning Community



What is Relevance?

Two-way Conversations



Values

**Community
Issues**

Relationships

**Societal
Benefits**

**Reflection
Prompts**

**Local
Context**

**Everyday
Lives**

Emotions

How to make it relevant?



Temperature Mapping



Star Formation

Temperature Mapping Relevance (Part 1)

Everyday Lives

Connected topic with everyday relevance: **Urban Heat Islands**

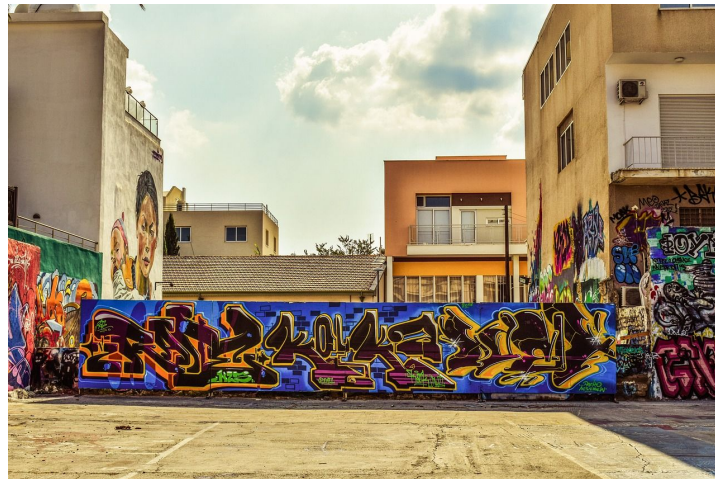
Community Issues

Talk and **listen** to groups representing your intended audiences or individuals from those audiences in your community. How does the issue affect them? What solutions are there?

Local Context

Find **local programs** or **municipal agencies** trying to address the issue. Consider combining the activity with community-centric information or examples (e.g. a popular parking lot, a specific stretch of sidewalk)

Societal Benefits

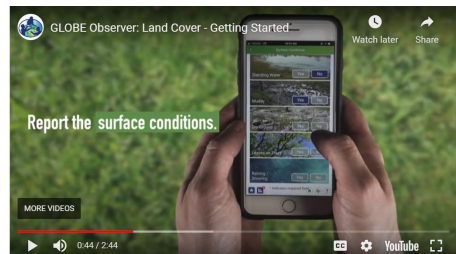


Temperature Mapping Relevance (Part 2)

Don't forget other components of the activity in your toolkit or on nisenet.org

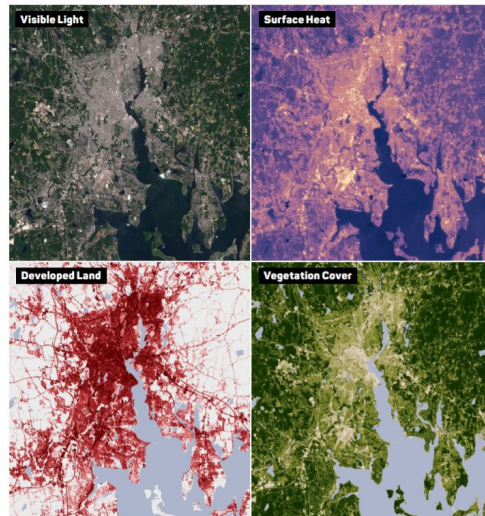
Local Context

*Globe Observer app connection lets learners record data in their local area and learn about the important factors of land cover.



Societal Benefits

*Info sheets like this one on Urban Heat Islands showcase real world topics and history that can be used in conversations with partners and learners.



Everyday Lives

*Check activity extension in the facilitation guides for ideas on additional activities that could bridge to relevant topics and experiences.

Optional extensions

Provide participants with simple materials to create roofs for a small cardboard box (e.g., white felt and black felt) and challenge them to choose a roof that reflects the most light and therefore keeps the roof cool.

Star Formation Relevance (Part 1)

Stars and emotions: All the people, pets, and objects you love are made up of matter from stars.

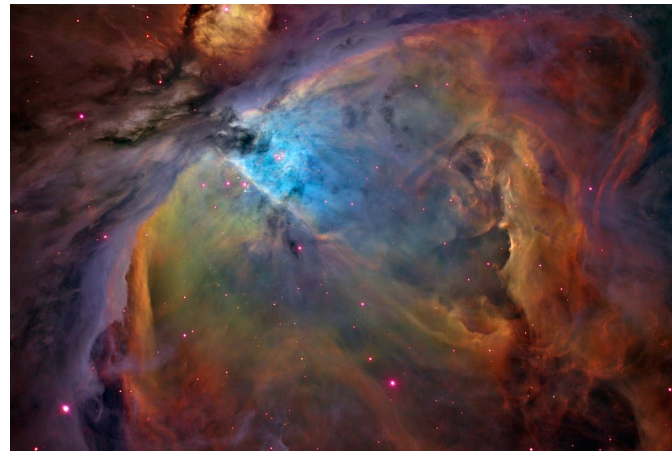
Emotions

There is a lot of **beauty** in space images. This is a great way to evoke **emotions** in your learners. Ask your intended audience to explore space images with you. What are their reactions? How do they relate to the image? Discuss **creative projects** you can do together with community partners.

Values

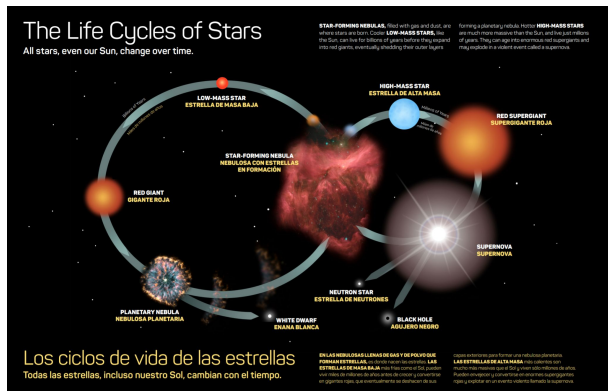
Reflection Prompts

Why should we study stars? Ask learners to reflect on our very own star, the Sun. How does the Sun impact their lives? **Reflect** on the important role it plays in our lives and society.



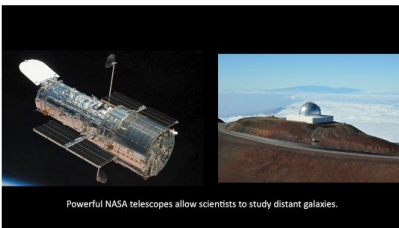
Star Formation Relevance (Part 2)

Don't forget other components of the activity (and related ones) in your toolkit or on nisenet.org



Reflection Prompts

*Stars don't last forever and their life cycle is why we have such a variety of elements in the universe. Use The Life Cycle of Stars to tell this story and connect with other activities.

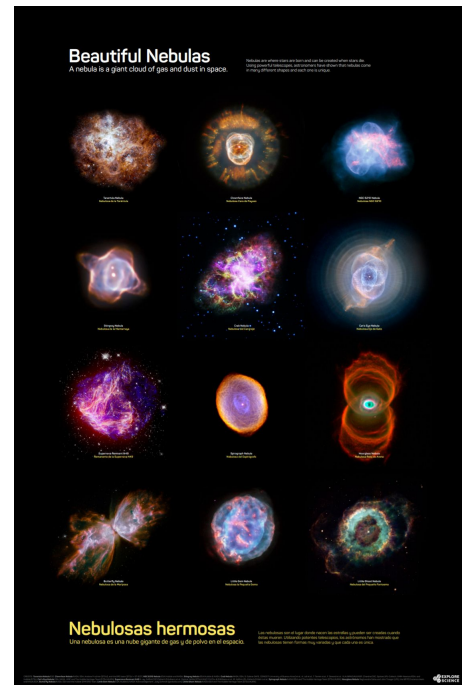


Values

*Don't forget about Content Training Videos for each activity. These videos bring up many relevant connections. Land and space-based telescopes are huge, expensive projects. How do these effort inspire us?

Emotions

*Don't forget the Beautiful Nebulas poster with Nebula Spin Art. How can these images connect to the emotions and imagination of your learners?



Tough Love on Relevance....

- Maybe opening your doors wider will not encourage new audiences to enter.
- What invisible keep-out signs are at your institution?
- The hardest part of working with outsiders is not finding them, it is listening to them.

Get to know your community partners & LISTEN to them early in your projects!



Watch Nina Simon's TED talk on YouTube:
<https://youtu.be/NTih-l739w4>

Resource reminder: Communicating Climate Change

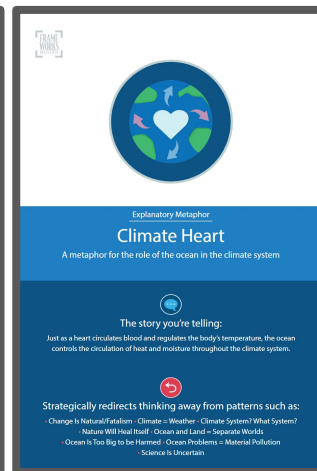
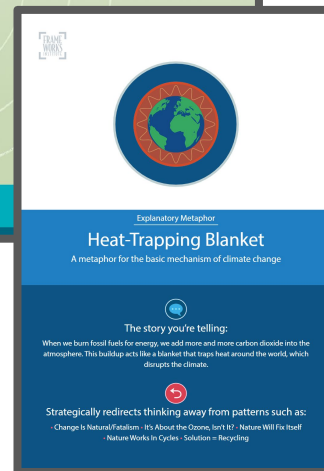
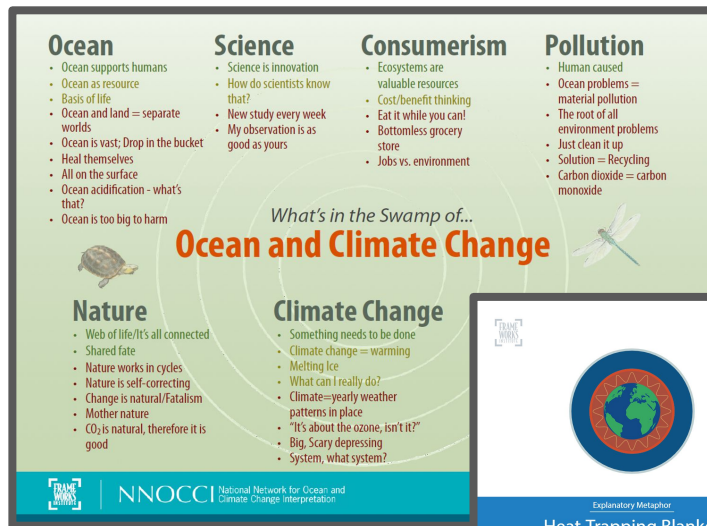
How to talk about Climate Change with your learners:

- Swamp graphic of climate change shows dominant models public audiences are stuck on
- Important metaphors for climate change
- Important values connected to climate change



nisenet.org/climatechange

(scroll down to the Communicating climate change science section)



Resource reminder: STEM Experts Guide

Crack open this ginormous guide for:

- Lists of national organizations that may be able to help you connect to local partners
- Making your project more relevant to experts! 🍌
- More info on Diversity-Serving Professional Societies and Indigenous Ways of Knowing



nisenet.org/working-with-experts



Working with STEM Experts:

A Guide for Educators in Museums
and Other Informal Learning Settings

NISE
NATIONAL INFORMAL
STEM EDUCATION
NETWORK

Thank You

