



THE
GLOBE PROGRAM 

K-2 Breakout Sessions: Atmosphere Pedosphere Biosphere

AMSTI GLOBE Training

April 8th- 9th

Sherry Herron
Haley Wicklein

Welcome! Please add your name
and your region to the chat.





ATMOSPHERE

April 8, 10:00 - 11:15

Important Links:

- [Agenda](#)
- [Padlet](#)



Welcome! Please add your name and your region to the chat.



INTRODUCTIONS

Welcome!

Share your first names and region.

If multiple members from one region, have one person share.

ATMOSPHERE

Research Question: What is all around us?

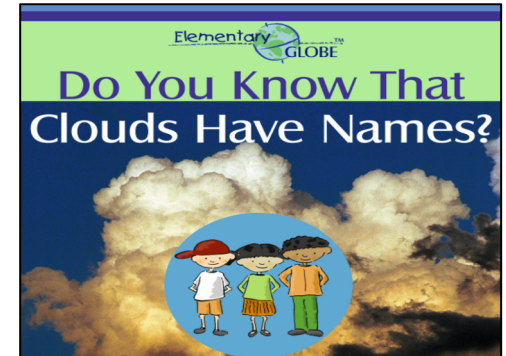
Process Skill Focus: Measurement

Content Focus: Weather





Flip Book: Do You Know That Clouds Have Names?



Have your laminated cloud images at hand! As we do a demo read, be ready to hold up the cloud types.





Cloud Song

The Cloud Song (tune of *London Bridge*)

by Lynne Hehr, Hehr Education Services

Look at the sky and what do you see? What do ya see? What'd'ya see?
Look at the sky and what do you see?
Are there any clouds?

If the cloud is puffy and white, puffy and white, puffy and white,
If the cloud is puffy and white,
then it's Cu-mu-lus.

If the cloud is flat and gray, flat and gray, flat and gray,
If the cloud is flat and gray,
then, it is strat-us.

If the cloud is wispy and high, wispy and high, wispy and high,
If the cloud is wispy and high,
then, it is cirr-us.

Look at the sky and what do you see? What do ya see? What'd'ya see?
Look at the sky and what do you see?
Tell us about your cloud?





HUMAN SUNDIAL ACTIVITY



HUMAN SUNDIAL SHARE OUT

Did you learn anything? What did you learn?

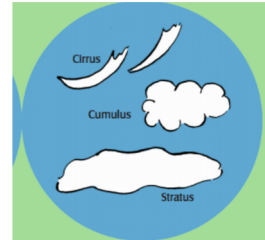
Did doing this activity lead to a deeper understanding of Earth systems?

Did you modify the activity? Were there any logistical constraints?





ATMOSPHERE JAMBOARD



You will be randomly assigned to a breakout room.

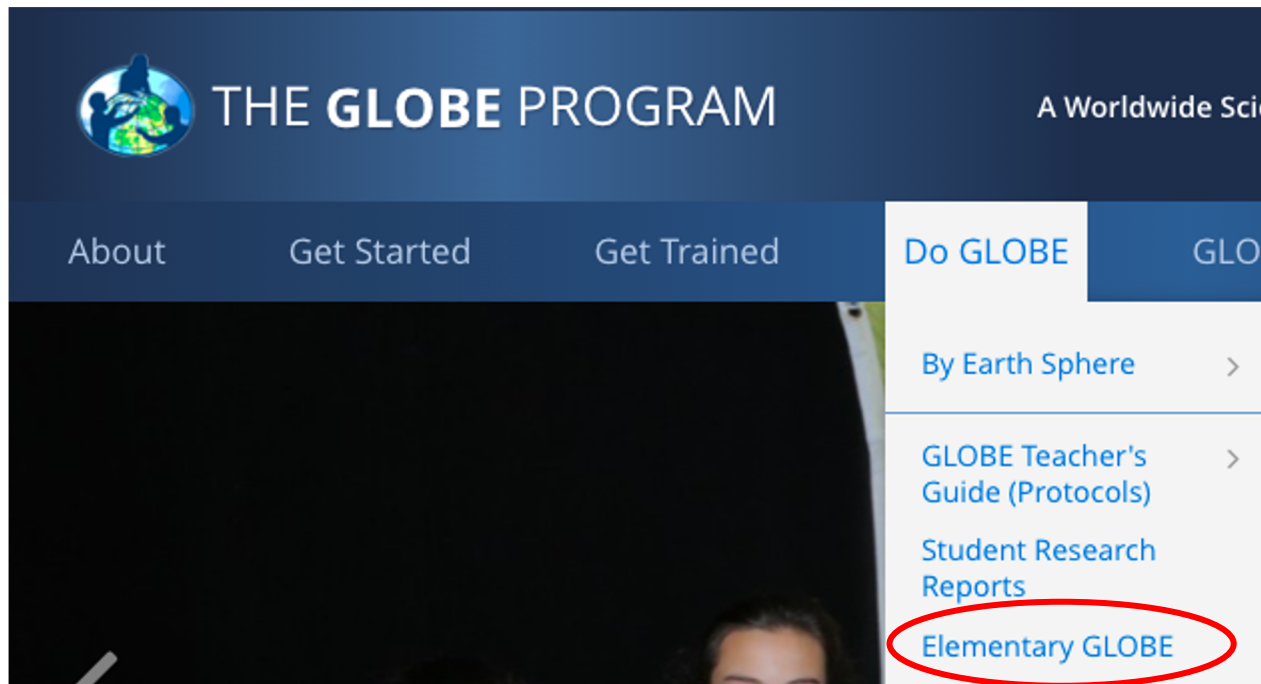
Your group will have 10 minutes to complete the mini activity* and be ready to report to the group a **brief** overview and any considerations for the K-2 age group.

[JAMBOARD link](#)

**Mini activities are modified from Elementary GLOBE Learning Activities.*



GLOBE WEBSITE: Finding Elementary GLOBE



<https://www.globe.gov/web/elementary-globe>



Great Work!! Lunch Break until 12:30.

Lunch homework: Read The Scoop on Soils Flip Book



At 12:30 meet back in the main room to get started on pedosphere!

PEDOSPHERE

April 8, 12:45 - 2:00

Important Links:

- [Agenda](#)
- [Padlet](#)



PEDOSPHERE

Research Question: What do we stand on?

Process Skill Focus: Collecting Data

Content Focus: Landforms and Erosion



Flip Book: The Scoop on Soils



Answer in the chat: Share your thoughts on classroom implementation of the Flip Books.



SOIL MAKERS: WEATHERING

You will be assigned a room randomly:

Zoom Room 1: ICE, SPRAY

Zoom Room 2: SANDPAPER, SUBMERGE

Zoom Room 3: DRIP, DROP



INSTRUCTIONS

In your breakout room, follow the instructions (beginning on Page 5) of Soil Makers to weather your mud pie by the *two* methods listed for your group.

Record your observations on the Weathering Activity Sheet.

SOIL MAKERS: WEATHERING SHARE OUT

How can a teacher manage the classroom logistics of this activity?





SOIL MAKERS: EROSION

You will be assigned a room randomly:

Zoom Room 1: GLACIER, RAIN

Zoom Room 2: WIND, FLOW/FLOOD

Zoom Room 3: BEACH, RAIN



INSTRUCTIONS

In your breakout room, follow the instructions (beginning on Page 10) of Soil Makers to erode the soil in your tray by the *two* methods listed for your group.

Record your observations on the Erosion Activity Sheet.



Great Work!! Break until 2:15.



Evening Homework: Read the Mystery of the Missing Hummingbird Flip Book and complete the Thermometer Activity as you read.

At 2:15, meet back in the main room to talk about Earth System Science!



BIOSPHERE

April 9, 9:45 - 11:15

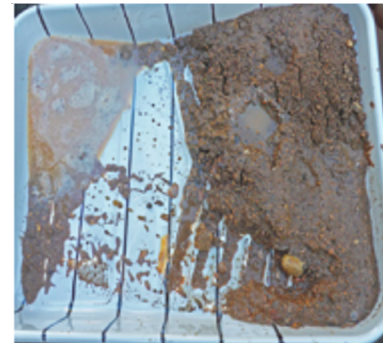
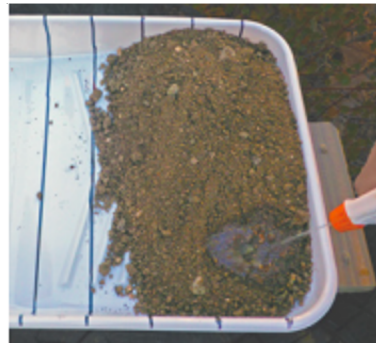
Important Links:

- [Agenda](#)
- [Padlet](#)



SOIL MAKERS: EROSION SHARE OUT

How can a teacher manage the classroom logistics of this activity?



PEDOSPHERE JAMBOARD



You will be randomly assigned to a breakout room.

Your group will have 10 minutes to complete the mini activity* and be ready to report to the group a **brief** overview and any considerations for the K-2 age group.

[JAMBOARD link](#) (*Haley put the link in the chat*)

**Mini activities are modified from Elementary GLOBE Learning Activities.*

BIOSPHERE

Research Question: What kind of living things are around me?

Process Skill Focus: Observation

Content Focus: Life



Flip Book: The Mystery of the Missing Hummingbird



Answer in the chat:
Share your thoughts on classroom implementation of the Flip Book with the Thermometer Activity.

Name _____ Fill in the Thermometers Mystery of the Missing Hummingbirds How Celsius Feels! 30° is hot 20° is nice 10° is chilly 0° is ice	August 	October 	November 	December
	January 	February 	April 	June



HUMMINGBIRDS of ALABAMA

Photographs from the Macaulay Library



The **Cornell** Lab  of Ornithology

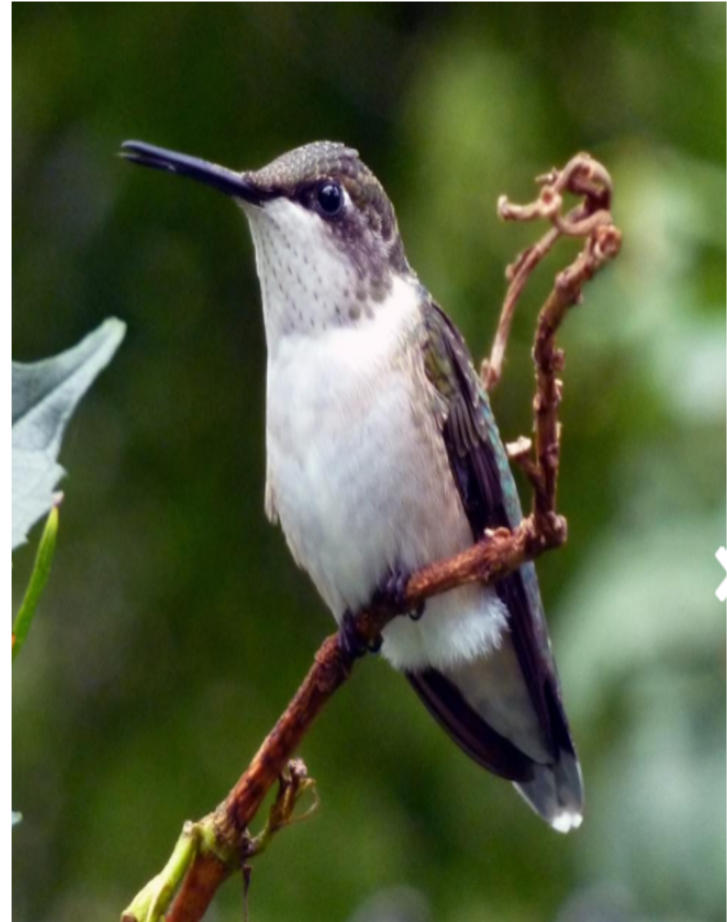
Ruby-throated Hummingbird

male



©Ian Davies

female



© Cathy Pondelicek

Black-chinned Hummingbird

male



© Mike Stewart

adult female or young male



© Jay McGowan

Broad-tailed Hummingbird

male



© Alan
Versaw

female or young male



© Brian
Sullivan

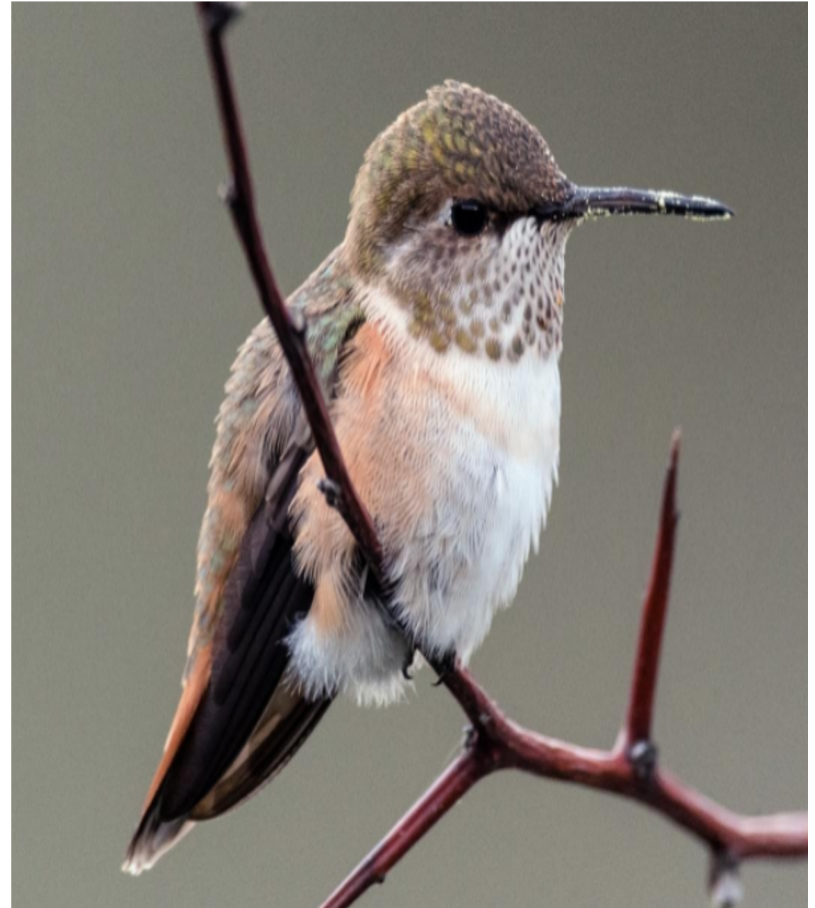
Rufous Hummingbird

male



© Spencer Follett

female



© Ian
Routley

Calliope Hummingbird

male



© Marya
Measman

female or young male



© Kent Leland

This Ruby-throated hummingbird's throat does not show red due to the angle of sunlight when the photo was taken.

The photo can be cut to create a puzzle.





HUMMINGBIRDS: FIND YOUR FLOCK



Practice observation with a kinesthetic game.



COLORS OF THE SEASONS

Have your two 'Colors of the Seasons' Activity Sheets at hand.

What colors do you see **inside the classroom**?
Which are the most common? Uncommon?

What colors do you see **outside in nature**?
Which are the most common? Uncommon?

[Colors of the Seasons Spreadsheet](#): Add Your Data



COLORS OF THE SEASONS

Have your two 'Colors of the Seasons' Activity Sheets at hand.

What colors do you see **inside the classroom**?
Which are the most common? Uncommon?

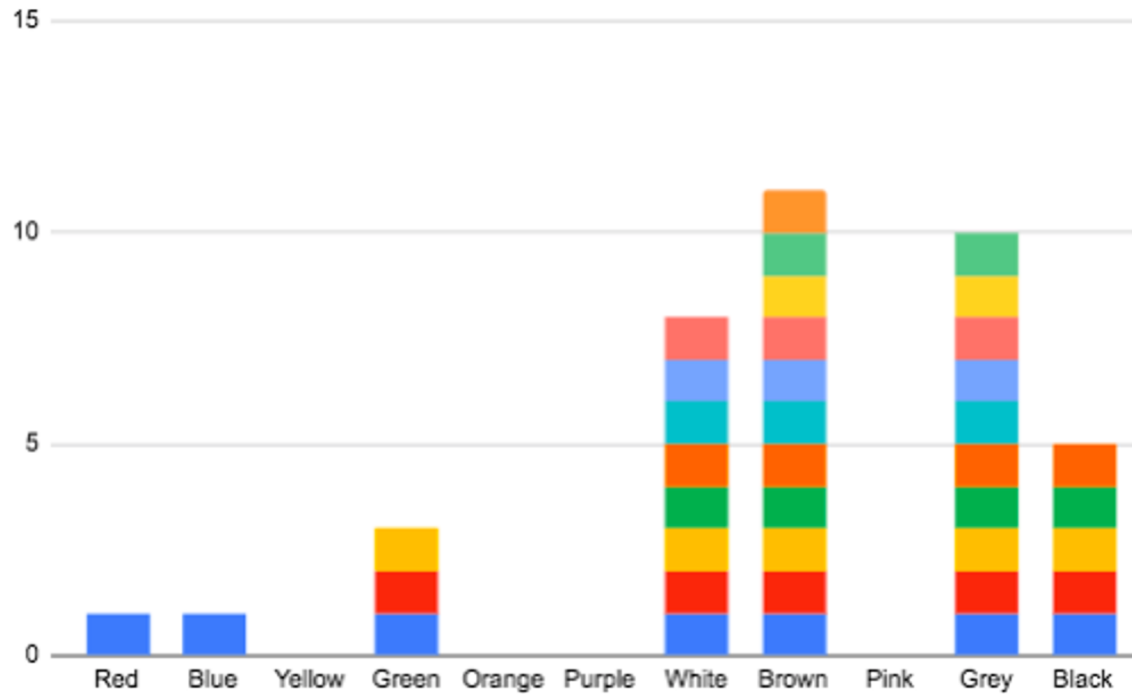
What colors do you see **outside in nature**?
Which are the most common? Uncommon?

[Colors of the Seasons Spreadsheet](#): Add Your Data



COLORS OF THE SEASONS

Example Winter Graph:





BIOSPHERE JAMBOARD



You will be randomly assigned to a breakout room.

Your group will have 10 minutes to complete the mini activity* and be ready to report to the group a **brief** overview and how you would use this activity as a science notebook.

[JAMBOARD link](#)

**Mini activities are modified from Elementary GLOBE Learning Activities.*



WRAP-UP

Continue adding questions, thoughts and resources to the [Padlet](#)!

More learning on these activities and office hours will be scheduled before the next workshop.



Great Work!! Lunch Break until 12:30.

**After lunch, meet back in the main room to
get learn about visualizations and
eTraining!**

