

Ms. Patel's class had been learning about the Earth all year long and were now going to present a play about the Earth system. The students were so excited. They were ready to try on their costumes and practice their lines with each other.

"You have worked so hard to pull this play together, and it has been a lot of fun", Ms. Patel said, "up until today you have been practicing at home, but now you will be able to practice with the rest of the class! Tomorrow is the day the play is set to show the entire school and your families."



Ms. Patel continued, "Please line up to go the auditorium so you can practice on the stage. Make sure you bring your props, scripts, and all the pieces of your costume with you."

As the class walked down the hall, Simon said, "This is so exciting. I have been practicing my lines at home and I am ready."

Anita added, "I've had my lines ready for a long time because I have the lead in the play and I wanted to be really prepared."

Dennis said, "What are you talking about, Anita? I have many important lines, so I am the lead in the play!"



When the class arrived at the auditorium, the students in the choir went over to the piano with the music teacher. Some of the other children got to work painting scenery. The actors stood on the stage waiting for Ms. Patel.

Their mood had changed, and everyone looked upset. Ms. Patel asked, "What's wrong? You were all so excited back in the classroom."

"Well, we all think we have the lead in the play!" Simon said. "When I was learning my lines, I thought my part in the play was the most important, but that's what everyone else is saying about their parts, too!"

"Hmm, maybe in order to figure this out we need to hear why each of you think your part is the most important," said Ms. Patel.





"Simon, you are water," said Ms. Patel. "Please tell us about why water is an important part of the Earth system."

"OK. I am water, and nothing on Earth can live without me," Simon stated and walked to the center of the stage. "I fall from the sky as rain and help plants grow. Animals drink me. I help breakdown materials to make soil. I form clouds and help keep the Earth cool. Besides being rain, I am also snow, hail, and sleet, and I can be found in oceans, lakes, rivers, and other waterways. When I freeze, I become ice."



adapted by Lynne Hehr for the GLOBE program

"Thanks, Simon. That's very good information," said Ms. Patel. "Now let's have someone else talk about their part of the Earth."

Emily stepped up. "I am air. I am what makes wind, I help move clouds and storms from one place to another so it can rain or snow on Earth. Animals need to breathe me. Some plants use me to scatter their seeds around so they can grow in different places."



"Nice job, Emily. Those are good details about air," said Ms. Patel.

"I'll go next," said Dennis. He walked to the center of the stage. "I am soil. Plants use me as a place to grow. Animals eat the food that grows in me. I also provide homes for critters, and humans use me to build their homes. I am part of mountains and other landforms on Earth. So, obviously, I am the most important."

"Thanks, Dennis," said Ms. Patel. "Those are good facts to consider. Who's next?"



Anita moved to the center of the stage and cleared her throat.

"I am all living things, plants and animals. Animals either eat plants or other animals. When I die, I become part of the soil. When I am a plant, I help make the air we breathe. I help recycle water around the Earth. See, I am really the most important part here!"



"Thanks for sharing that, Anita," said Ms. Patel.

"We still need to hear from one more character, the Sun!"

The kids looked puzzled and at the same time asked, "The Sun?" Simon added, "The Sun isn't even on the Earth!"

Ono stepped in. "I am the Sun and I know I'm not on the Earth. But I am still very important. I heat the Earth so that it is warm enough for things to live. I give plants energy so they can grow and become food. I help the water in the oceans become clouds. From my perspective, I see how everything is connected?"



Ono added, "Water, air, soil, plants, and animals are all on Earth together. You ALL need each other! If you think about what everyone has just said, you'll see you're all connected. That means no one is the lead in the play!"

Ms. Patel smiled and said, "Very good point, Ono. Each one of you has shown that your part of the Earth system is important. But could any of you exist without the other?" "No!" they all called out at the same time.

"Wow, Ono, you're right!" Simon said, "My part of the Earth system depends on all the other parts. But how can we show that in our play?"

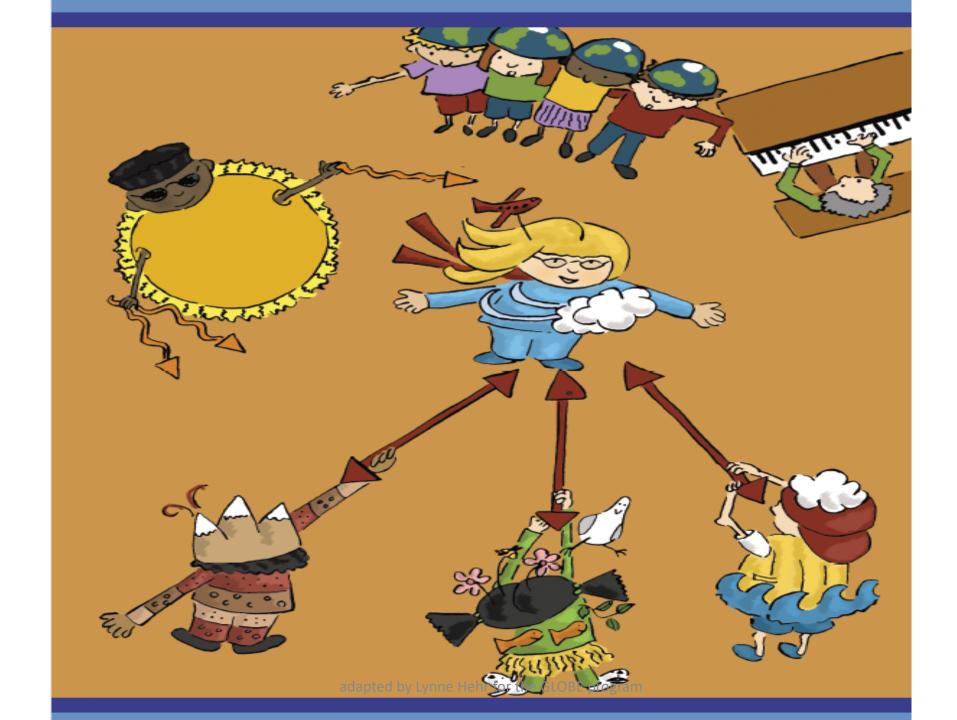


"Let me try," said Dennis. "I am soil and I wouldn't exist without everything else. I am made up of plants and animal material and rocks. And water and air help break down those materials to make soil."

"Hey, I have an idea!" exclaimed Anita. "Let's make big arrows that we can move around on the stage. And when we talk about these connections, we can put the arrows in between each part of the Earth system to show how everything fits together."

The students used their supplies to make big, bright arrows to use in their play.

"Class, this is wonderful," said Ms. Patel, "You all are working together now, just like all of the parts of the Earth!"



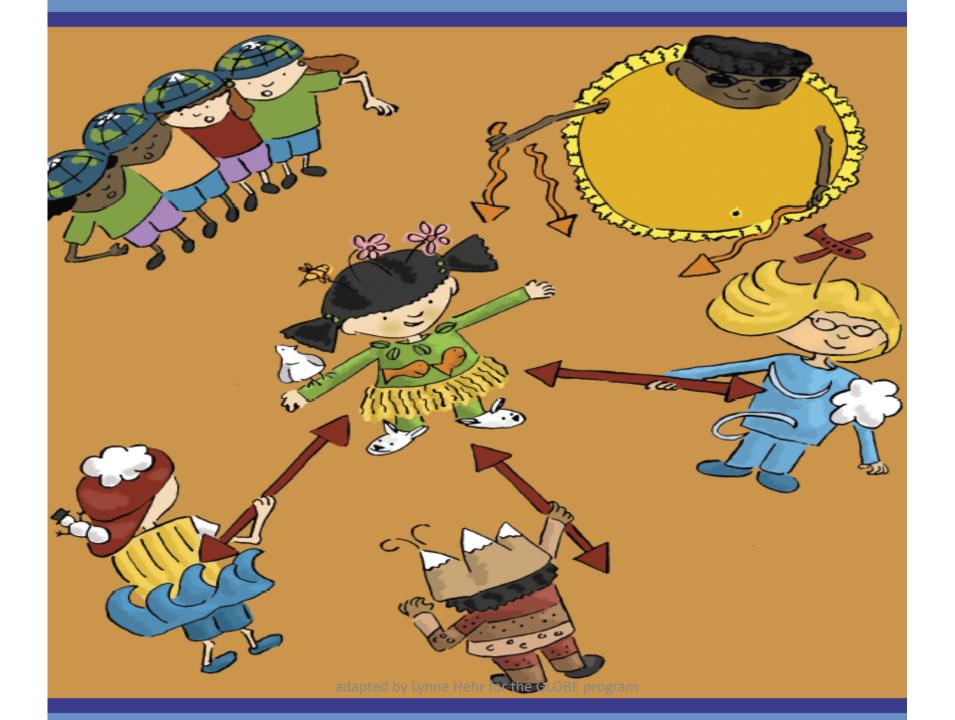
When they had finished making the arrows, Emily said, "Now let's act out how all the parts of the Earth system need each other!"

"Great idea, Emily," said Ms. Patel. "Since you are air, please explain to us how we could use the arrows to show how you are connected to everything else."

"Well, the air keeps storms moving around the Earth. That way it can rain and snow in different places. Animals need to breathe air to live. Plants help make the air that animals breathe. Air helps make soil by breaking down dead plants, animals, and rocks," Emily said as she placed the arrows around the stage.

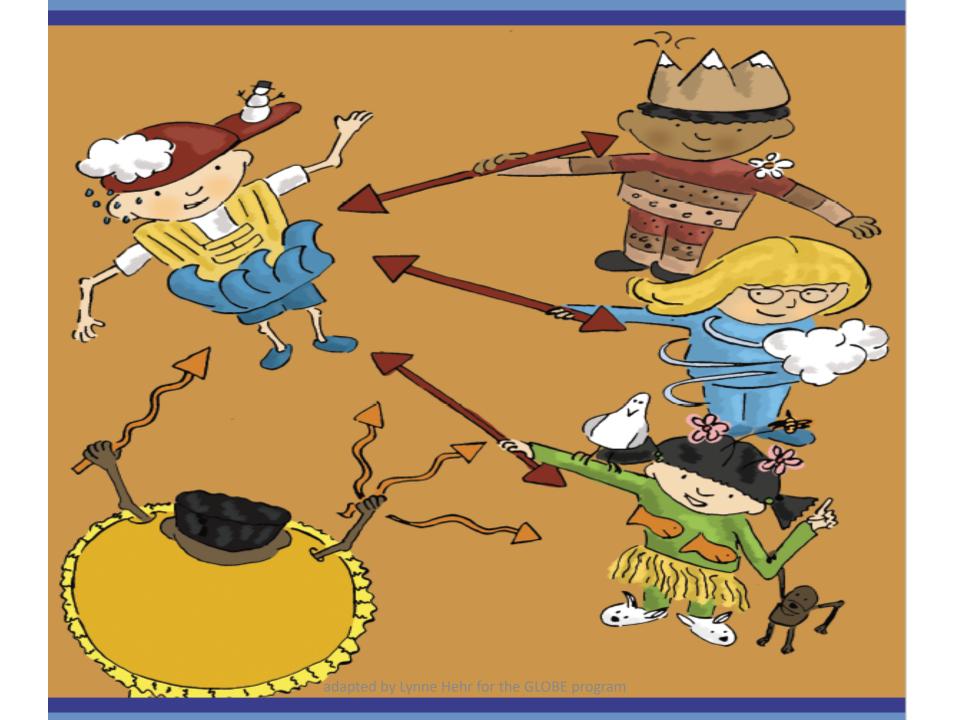
The other kids went to stand in their places. "What about me?" Ono asked. "Where should the Sun fit in with all these arrows?"

Simon said, "Well, the Sun connects to everything because you provide warmth and energy on Earth, so you need to have special arrows that point toward all the other parts.



"I get it," said Anita. "Now let me make a connection with plants and animals." "Plants and animals need water to live," Anita continued. "And soil is where plants can grow to become food. Some animals live in the soil, too. Animals need to breathe the air. Air also brings different kinds of weather around the Earth, and animals and plants need rain and snow."

The students used the arrows and moved around the stage to act out these connections. Once again, the Sun was connected to everyone.



"Now I'll share the ways water is connected to all of you," said Simon. "Water has a lot of different forms. As rain, water helps plants grow. In clouds, water blocks sunlight and keeps the Earth cooler. Some animals live on ice."

Anita added, "Some animals also live in water, in rivers, lakes, and oceans. And animals need to drink water to live. Water has many more connections to everything else than I realized!"



"I think we have heard from everyone now," said Ms. Patel. "You have done a wonderful job learning about all of the connections in the Earth system. Are we ready for the play now?"

Dennis said, "Yes, but let's practice one more time now that we know everyone has a starring role in this play!"

In the background they heard the chorus singing, "This is how we all connect, all connect, all connect. This is how we all connect, in the Earth system."

Emily exclaimed, "This is going to be great! We are all ready and it sounds like the chorus is ready too!"



The next night with costumes on and props gathered,

Ms. Patel called out. "It's almost time to start – remember to have fun! Places, everyone!"

The chorus took their places at the back of the stage. Simon, Anita, Ono, Emily, and Dennis picked up their arrows and moved to the center. As the curtain rose, Ms. Patel stood back and thought about the whole school year. She was proud of her students. They had learned about the parts of the Earth system and now they could share this information with others.

The chorus finished singing the Earth Song. Then Dennis spoke the first line of the play, "We are air, water, soil, plants, animals, and the Sun. We all need each other. Together we make up a system called Earth!"