CSEL Science

Activity Packet

CSEL CENTER FOR THE SUCCESS of ENGLISH LEARNERS

Activity 1

Directions: Review the CSEL science descriptions of the 5-E model on page 1 of the Content Handout. As a group, discuss how the student activities on the Content Handout (pages 2-6) align with the 5E model. We will reconvene and debrief as a group.

Example: The activity on page 2 of the Content Handout aligns with "engage." The teacher captures students' interest by showing a labeled illustration of the Chesapeake Bay and asking students to think of organisms that might live around the Chesapeake Bay and how the organisms get energy.

PROMPT:

How do the student activities on the Content Handout (pages 2-6) align with the 5E model?

Activity 2

Directions: Review the methods and resources to support learning on pages 7-12 of the Content Handout. As a group, discuss how well these methods and resources might help MLLs and their English-proficient classmates in your context. Suggest changes you might make to them so they work better in your context. We will reconvene and debrief as a group.

PROMPT:

How well would these methods and resources work in your context? Are there any changes you would make to them?

Take Home Activity

Directions: Review the science passage below. Based on what you learned in the CSEL Science presentation, describe the methods you might use to support students' science knowledge and academic language in the classes that you teach.

The Amazon Rainforest **by ReadWorks (www.readworks.org)**

The Amazon rainforest in South America is an amazing place. Filled with beautiful tropical flowers, towering trees, colorful parrots, and poisonous fish, it has some of the greatest levels of biodiversity of any region in the world. This rainforest has many different kinds of human cultures, from indigenous tribes to modern farmers. While all environments change over time, some scientists think rapid human development is changing the Amazon too quickly. These changes are putting some plants, animals, and humans in danger.

Unfortunately, many amazing plants, animals, and humans in the Amazon are under threat. People are using the Amazon to grow plants for humans, like bananas and sugarcane. Others are digging holes in the earth to look for oil or gas reserves. Still others are cutting down trees for lumber. To do this, developers are building farms, roads, and factories in areas where rare plants and animals thrive. This is a big problem for several reasons.

First, these changes in the Amazon will decrease the biodiversity of the rainforest. This means fewer rare plant and animal species will live there, and some species may go extinct as their habitat changes. Second, as the plants and animals die, the indigenous people who depend on them for food will also suffer from hunger. Third, when outsiders travel through the area via roads, they bring new diseases that can kill the native peoples. Finally, as new farms and factories begin to replace the forests and villages in the Amazon, they will produce more carbon dioxide, and fewer trees will absorb this gas. So, everywhere in the world, we may feel the loss of the rainforest as our planet heats up.

But there is good news. Many groups of volunteers, doctors, and environmentalists are teaming up to protect the Amazon. They are spreading the word to students like you about the plight of the rainforest and asking people to help. Some organizations are helping to buy land so it cannot be used for farming. Other organizations are fighting against the governments that want to build roads, arguing that they will endanger too many plant and animal species. And others are helping to provide medicine and healthcare to the indigenous tribes in the Amazon to help these populations cope with the big changes in their Many hope that there is still a way to save the rainforest and all of the plants and animals inside it.

Describe the methods you might use to support students' science knowledge and academic language in the classes that you teach. If you like, for each method you describe, create an example of the support