

WORKSHOP OVERVIEW | ECOSYSTEM ENGINEER



Overview:

Put your knowledge of plants and animals to the test! In this game, you'll help to maintain a biodiverse and healthy ecosystem in four different places around the globe. Your goal is to make sure that all the animals have enough to eat and the ecosystem stays healthy for 12 rounds of game play!

Activity Duration: 45 minutes- 1 hour

ESSENTIAL QUESTIONS

- *What kinds of organisms form the bottom of the food web in all ecosystems?*
- *What happens if an ecosystem is not biodiverse?*

MATERIALS NEEDED

- *Student Computers*
- *Game Links*
 - [Jungle Jeopardy](#)
 - [Make a Mangrove](#)
 - [Mountain Scramble](#)
 - [Feed the Dingo](#)



ACTIVITY DESCRIPTION

1. Pair up students to work together, sharing one computer between them.
2. Instruct students to complete at least three out of the four games linked above. If time allows, they can play all of them.
3. Open the game using the provided link and carefully listen to and read the instructions. The objective of the game is to create a stable ecosystem for all the plants and animals over 12 rounds of gameplay.
4. Start playing the game. Partners should take turns adding animals for 12 rounds, ensuring that their ecosystem remains healthy. If their ecosystem becomes unhealthy, they can start over and try again.
5. Once they have played at least three games, partners should collaborate to answer the reflection questions on the next page.

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REFLECTION QUESTIONS



1. Which ecosystem was the easiest to balance? Which was the hardest? Why do you think that was?



2. What types of organisms (ex: plants, animals, herbivores, carnivores) did you need the *most* of in each ecosystem?

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REFLECTION QUESTIONS



3. What types of organisms (ex: plants, animals, herbivores, carnivores) did you need the *least* of in each ecosystem?

4. How did you create biodiverse ecosystems?
