

We Need Our Space!

Grade 5

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References:

- Columbus Public School Curriculum Guide
- SEED Program

Benchmarks & Objectives:

- GLI LS-4: Summarize that organisms can survive only in ecosystems in which their needs can be met (e.g., food, water, shelter, air, carrying capacity and waste disposal). The world has different ecosystems and distinct ecosystems support the lives of different types of organisms.
- GLI LS-5: Support how an organism's patterns of behavior are related to the nature of that organism's ecosystem, including the kinds and numbers of other organisms present, the availability of food and resources, and the changing physical characteristics of the ecosystem.

Materials:

- A sheet of newspaper for every student.

Activity:

Begin a discussion about what would happen if we were to put three large bass in the freshwater ecosystem tank in the back of the room. Explain that everything needs space to live. Take the students outside. Mark off a large square or circle on the sidewalk or in the grass. Give one student a piece of newspaper and have him walk into the area, set it down and stand on it. Explain that he is a squirrel and he needs that amount of space (the newspaper's space) to gather enough food to live, and to live comfortably. Ask him how he/she feels. Since there's enough room, then the population increases. So let's double the size and send in another kid as a different animal. Repeat his process until things start to get crowded. Then ask questions pertaining to how they feel, what it means to overlap newspaper, and whether or not the population will increase now. Repeat his process for different sized areas.

Target Observations:

- Overlapping newspaper means that two animals are fighting over the same resources. They might confront one another fighting for food, and one may die as a result of not getting food.
- Populations are limited by the amount of space and resources available. (Does this same rule apply to humans as well?)