

Mind-Meld Game – Ecosystems

Teacher Preparation

Overarching learning goals: Students build on their understanding of an ecosystem's components and of subject-specific vocabulary.

Teacher content information:

The **biosphere** describes our living world, from the upper areas of the atmosphere to the depths of the ocean. **Biodiversity** is a term used to describe all the living organisms that make up the web of life on Earth. From a microscopic bacteria, to a naked mole rat! Biodiversity consists of three levels: species diversity, ecosystem diversity and genetic diversity - all of which are equally important when considering conservation.

As the biosphere is too big to study as a whole, scientists study smaller parts called **ecosystems**. An ecosystem is made up of living things (**biotic components**) and non-living things (**abiotic components**) that interact in a particular area called an **environment**. The key to understanding ecosystems is realising that nothing exists in isolation, but rather all living things are connected to other living things and their physical surroundings. In a rock pool ecosystem, some examples of abiotic components would be the seawater, temperature, sunshine, rocks and shells. The biotic components might be hermit crabs, seaweed, octopus, fish and plankton.

Hot tips: The mind-meld game can be used for any key concepts. Feel free to develop your own key words.

Digital learning details: N/A



Lesson and Student Organisation:

Step 1: Students should be organised into teams of two for this word association game.

Step 2: The whole class will be given a keyword, for example 'iPod'. Each team member silently writes down three words that come to mind about iPods. The aim of the game is for both members of the team to get a mind-meld by matching their words (as int he sample below, 'music' is a match.

Example:

| Billy | Simon |
|----------|-------|
| Music | Games |
| Earphone | Songs |
| S | |
| App's | Music |

Scoring: Each mind-meld scored is worth five points. As a result of matching the word 'music', the team in the example above would score five points.

The team with the most amount of points after three rounds wins!

Keywords:

Round 1: Australian animals

Round 2: Biotic factors in a desert ecosystem

Round 3: Abiotic factors in rock pool ecosystem