The Web of Life Game Instructions

Web of Life Game (1st part)

Description: The web of life game was designed to give a perspective about the interconnections between all living beings and earth resources. It is based on the assumption that all Earth elements are interconnected and are all equally important for the functioning of our ecosystem.

Materials:

- Medium to large rope or sisal roll
- Cards with tags (as will be explained bellow)
- Adhesive tape to attach cards to student's t-shirts
- Computer, tablet or smartphone for each student (optional)

Instructions

Before beginning the game, you will write or draw tags in the cards (see example below), choosing a wide variety of elements according to the number of students that will play the game. Make sure you use the "human" tag so that students realize how our species is interconnected to all others as well.

Note: This game will function with about 10 students, however all students can and should be involved.

Tag examples: river water, sea water, Sun, soil, tree, bees, plants, flower, seeds, sea fish, river fish, spider, squirrel, fox, wolf, bird, mushrooms, human, mosquitos, butterfly, warms, lion, wolf, ants, bees, rabbit, giraffe, crab, bear, dead leaf, bumblebee, deer, living leaf, grass, woodpecker etc. – make sure you include Bees

You should adapt your choice of tags according to the number of your students, provided you include elements from the maximum number of ecological chains possible.

Each student will randomly choose a card. You should give them a few minutes (ideally 5 min) to search the web for the most important particularities of their tag, for example, how and where they feed, live and mate. For this they will need access to a smartphone, tablet or computer. If you do not have access to this equipment or to the Internet, you should prepare a profile (habitat, diet, reproduction, etc.) for each tag in advance so that students can have access to this information during the game.

Then, all students with tags will form a circle. One student will begin the game, for example the one with the tag spider (or other but not a predator). This student will be given the rope roll. Considering his/her tag, this student will choose another student from the group to which his/her tag is related and grabbing the end of the rope he/she will throw the roll to the other.

For example: the spider feeds on mosquitos, so the student with the spider tag throws the roll to the student with the mosquito tag. Then the second student will grab a piece of the rope and do the same thing with a third and so on. The rope will go back and forth until a web is created. The more connections students make among tags, the stronger the web will be.

The same student can be thrown the rope multiple times according to the connections established with his/her tag.

During this process, all students may give suggestions to the one with the rope as it is a collaboration game.

Example of what to expect:

Some examples of associations:

Spider – eats mosquitos; uses plants to build the web; need water; …

Fox – eats rabbits and rats; drinks water; …

Tree – needs water; needs Sun; needs soil; …

Birds – eats spiders; eats worms; needs the tree to live; …

Soil – needs water; needs worms; needs decomposing materials from animals; …

Flowers – need bees; need water; need Sun; …

Bees – need flowers; need water; …

Bear – eats fish; needs water; …

Fish – Need water; feed of plants; …

Etc.

When the web is finished it is supposed to be strong and steady. If you (teacher) decide not to participate in the game and stay outside the circle you can now go in the circle and push the web towards the floor. This will show the students how strong the web is with all its interconnections.

When the web is finally created you should call their attention to its strength and to the number of connections that all elements have. Even those that previously didn't seem to connect at all are somehow now interconnected. It is important to highlight the idea that the web they created resembles the real ecological web and to give special attention to the fact that human beings are also included in this web.

Web of Life Game (2nd part)

The web of life game is a powerful visual game that shows students how our ecosystem is strong because of all the connections. However, it also represents a meaningful way of showing how one single act might disrupt the whole system.

In this moment, as the kids are standing and holding the powerful web they created, they will be asked to reflect on how humans might be disrupting this system and how much this might

affect all species including ours. If you are playing this game in an activity related to bees, you can give special focus to human activities that might be disruptive to the bee's ecosystem.

Students will be invited to talk about human actions and will decide which parts of the web are affected.

For example: if students talk about the chemicals that affect bees, the student holding the bee card will let go of the rope, then the class can think of what would happen to flowers without bees and the one holding the flowers card releases the rope, after this the students can think about what would happen to the animals that need wild plants to feed on, etc..

If your students don't know of any human caused disasters, you can be the one naming them.

Some examples of human impacts on the environment:

- Monoculture crops – kills soil – kills plants – kills trees – affect bees and animals that feed on plants – affects animals that live in the trees - …
- Fires – kills trees – kills plants – kills animals – affects bees
- Climate change – affects bees – affects plants – all animals that feed and live on plants - …
- Pesticide use – kills insects – kills bees – kills plants..
- Fog derived from human pollution – covers the Sun – affects plants – affects herbivores – affects predators - …
- Light pollution – attracts animals into the city, confuses insects that get trapped in light bulbs, confuses birds in their migration, colliding with buildings, etc
- Oil spill in sea – kills fish – affects bears – affects humans – affects birds - …
- Fires – kills trees – kills plants – kills animals - …
- River drought for oil extraction – kills fish – no water for animals or humans - …
- Introduction of invasive species like acacia – leads to extinction of indigenous species
- Etc.

As the web starts falling apart, eventually it collapses. Depending on the tags chosen by the teacher and the disasters mentioned, the web might fall in the first intervention or take longer to fall. However, the students will be left with a visual idea of how one single incident affects all living beings.

The web of life game is a powerful tool to learn about human activity and its impact in the ecosystem, however it doesn't provide specific content about each student's life. As such, we suggest that you take a minute to reflect with them about how meaningful individual actions can be. One specific point you may want to highlight is the fact that an impact beginning in a spider, or a bee, or a mushroom or any other tag will eventually end up affecting the whole web.