## **UNIT 6: THE DIVERSITY OF LIFE**

## LET'S MAKE A TREE.

Dear language assistant,

First of all, review the translation of some parts of the plants (roots, stem, trunk, nerve, vessels for sap, leaves, bark), some processes (photosynthesis, absorb) and some commands and actions (upright, stand up, deliver food, coming, going, I'm on my way, I won't let you...)

*Let's make a tree* is a very simple performance: the students represent the parts of a tree (nerve, roots, vessels, leaves, bark) acting in the way the teacher shows them:

- The teacher asks for two volunteers who stand in the middle of the group and they become the nerve.
- The teacher explains the function of the nerve.
- The teacher shows how they have to stand, back to back and with arms strongly joined. The teacher can push them to check they are really strong.
- The teacher tells them that when he shouts STRONG AND UPRIGHT they must answer loudly LET'S STAND UP. It can be done several times in order to check they have understood and in order to everybody learn these sentences.
- Then on, the teacher ask for three volunteers who become the roots and teaches the function of the roots and what the students have to do. Eventually, review nerve and roots.
- Four volunteers for xylem vessels: function, explanation of the performance and review (nerve, roots and vessels).
- Four volunteers for leaves: function, explanation of the performance and review (nerve, roots, vessels and leaves).
- Four volunteers for floem vessels: function, explanation of the performance and review (nerve, roots, vessels, leaves and floem vessels).
- Six volunteers for bark: function, explanation of the performance and review (nerve, roots, vessels, leaves, floem vessels and bark).
- Two volunteers for woodpeckers, insects.
- Display of the whole performance. At the end you can tell chaotic orders: leaves, photosynthetize!, sap up!, roots; absorb!; leaves, photosynthetize!; strong and upright!; vessels, deliver food! and so on.

Part of the plant (25 people)	Where is it? What is it for?	Teacher's orders	Students' words and actions
Nerve (medula)	It's the central part of the stem and holds the plant upright, even when winds are very strong.	Nerve, strong and upright!	Standing! (Joining arms strongly)

Roots 3	They are underground and they take water and minerals from the soil (root hairs).	Roots, absorb!	Chop, chop,chop (They are sitting down and shaking legs)
Vessels I (xylem vessels) 4	Inside the trunk there are tiny tubes that carry water and minerals from the roots to the leaves. This is called raw sap or crude sap (savia bruta)	Vessels, sap up!	Going! (¡Maaarchando!) (Raising hands)
Leaves 4	They are the organs of photosynthesis. They make food for the plant. Green plants need sunlight to produce food. They 'capture' the sun's light energy using the chlorophyll in their leaves and use it to make their own food. Leaves need CO <sub>2</sub> and H <sub>2</sub> O and they release oxygen.	Photosynthesize!	Ñam, ñam, ñam (Holding hands up and moving fingers)
Vessels II (Phloem vessels) 4	The food produced in the photosynthesis reaction can be carried to other parts of the plant in phloem vessels.  This substance is called elaborated sap (savia elaborada). Therefore, there are two vascular systems, one for crude water and the other one for elaborated sap.	Deliver food!	Coming! ( or I'm on my way) (¡Voy!) (Moving hands down)
<b>Bark</b> 7	Protective covering of woody plants. It works preventing water loss and acts as a barrier to fungi and other invaders.	Bark, resist!	I won't let you. (Gesture like a rugby player)
Insects, birds 2	Woodpeckers can do their nests inside the trunk. Some insects put their eggs and larvae inside. Even some little animals feed up of wood.	Look out! Woodpeckers	Toc, toc, toc (Moving and trying to drill the tree)