LIFE PROCESSES OF LIVING THINGS
Linguistic level: A1

INTRODUCTION

In this project students think about different life processes in living things. They learn to distinguish between the ways plants and animals move, grow, interact, reproduce and seek nutrition. They work on a collaborative task to organise information onto a chart.

LEARNING OUTCOMES

Objectives specific to the content area

- Identify differences between life processes in plants and animals.
- Discuss how plants and animals move, grow, interact, reproduce and seek nutrients.
- Distinguish between ways plants and animals grow and change.

Key competences

- Basic competences in science
- Linguistic: oral communication
- Analysing material from different sources

Collaborative work

- Compare and contrast information
- Work in groups/pairs

LANGUAGE CONTENT AND COMMUNICATIVE OUTCOMES

Vocabulary

- Animals, plants
- Life processes: *growth, interaction, movement, nutrition, reproduction*
- Plant vocabulary: *pollination, roots, seeds*
- Animal vocabulary: *adult, baby, body*

Structures

- Plants turn towards the light.
- Animals react to their environment.
- Animals eat other plants and animals.
- Seed grow into plants.
- Babies grow into adults.
- Plants cannot move, but they grow.

Cognitive and thinking processes (including problem solving)

- Demonstrate knowledge of the life processes of plants and animals.
- Identify characteristics of plants and animals and distinguish between them.

ASSESSMENT CRITERIA

- Demonstrate knowledge of the life processes of plants and animals.
- Identify characteristics of plants and animals and distinguish between them.

ACTIVITY DEVELOPMENT

Materials you will need:

- Worksheet 1 (one per student or one per 2-4 students)
- glue
- scissors
- pencils

Optional materials:

- images of different planTs and animals

Timing

- One 40-minute class session

Instructions

Starting out

- Ask students to work in groups of 3-4 and to think of different characteristics of living things. Elicit answers.
- Ask students to think about how plants and animals are similar in terms of life processes. For example, ask: How do animals get food? How do plants get food? Do plants and animals grow and change?

- Put a P on one wall, an A on another wall and the letters P and A at the front of the class. Ask students to stand up and say sentences, for example: *They grow from seeds* (students face the wall with the letter P (plants)); *They have babies* (students face the wall with the letter A (animals)); They grow and change (students face the board P and A (plants and animals). Continue with other similar examples.

Step-by-step instructions

Activity 1

- Distribute Worksheet 1 and ask students to take out their pencils. Each student can be given a worksheet, or students can be divided into groups of 2-4 and can work on the task as a group.
- Before beginning the project, make sure students understand what they are expected to do. Ask them to look at the column on the left-hand part of the table and to write the words from the box in the correct place.
- When they have finished, they can check their answers with a partner. Check answers as a class.
- Ask students to think of how plants and animals move, interact, eat, reproduce and grow. Discuss answers.

Activity 2

- Distribute scissors to individual students or groups. Ask students to cut out the 10 items describing life processes of plants and animals. Ask them to read through the descriptions and to place the items in what they think is the correct place. They can then compare their ideas with a partner or with another group. Monitor and assess progress walking around the classroom.
- Collect scissors and distribute glue. Go over the answers and ask students to paste the descriptions in the correct place.
- When all of the answers are in the correct place, ask students to try to remember all of the information. They have one minute to try to memorise the descriptions. Ask them to turn the page over face down. Mime some of the actions from animals and/or plants. Students tap their desks if the information mimed refers to animals and snap (or clap) if the information said refers to plants. For example, react to light by turning towards it (plants; students tap their desks); move whole body (animals; students snap). Repeat with 3-4 other ideas.
- Point out that the sentences are not necessarily true for all plants and animals. For example, ask students if all animals have wings, legs or arms to move. Check if they can think of animals with different forms of locomotion (for example, snakes slither). Most plants need sun, but some plants (for example, ferns) do not grow as well in direct sunlight as in cool, shady areas.

- Collect the materials and congratulate students on their good work.

Answer key

1 Movement (P – cannot move but roots grow; A – move whole body)
2 Interaction (P – turn towards light; A – react to their environment)
3 Reproduction (P – new plants grow from seeds/pollination; A – have babies)
4 Nutrition (P – produce own food from sun; A – eat other plants and animals)
5 Growth (P – seeds grown into plants; A – babies grow into adults)

Extension activities

- BBC Science Clips
  Find out more about plants and animals in the local environment http://www.bbc.co.uk/schools/scienceclips/ages/6_7/plants_animals_env.shtml
- Air, land, water
  Ask students to think of plants and animals that can be found in the air, on land or in the water. Students can work on the BBC Science worksheet in groups or individually.
  http://downloads.bbc.co.uk/schools/teachers/ks2worksheets/bbc_teachers_ks2_science_worksheet_plants_and_animals.pdf
- Mime and guess
  Invite different students to the front of the class and ask them to mime one of the life processes of plants or animals. The rest of the students try to guess. When a few rounds have been played with the whole class, students can play the mime and guess game in small groups.
- 20 questions
  Ask students to think of a plant or animal. The others try to guess by asking questions. For example, if the student is thinking of, for example, a penguin the class could ask: Can it move? (yes); Does it have babies? (yes); Is it viviparous? (no), Can it swim? (yes); Can it fly? (no); Is it black and white? (yes) … Penguin!
- Life processes
  Ask students to work in small groups and to come up with a list of three things that are common processes to both animals and plants. Write a list of suggested answers on the board (movement, nutrition, growth, reproduction, interaction). Apart from the processes covered in the lesson, ask if there are any other processes they share. Point out that both plants and animals breathe/need oxygen for respiration and that that both plants and animals get rid of waste (excretion). Ask them how plants

and animals get rid of waste. Explain that forms of animal excretion include sweating, or urination. Plants release gases that are not needed. Another shared process in living things is sensitivity.

- Seven life processes plants and animals share
  Visit the BBC Bitesize webpage, where there is a useful phrase to help students to remember the seven life processes. It also includes a clear summary of the processes. Teach students the phrase and see if they can remember the seven life processes using the mnemonic phrase the following day.
  http://www.bbc.co.uk/bitesize/ks3/science/organisms_behaviour_health/life_processes/revision/2/

Worksheet 1

LIFE PROCESSES

You will need:

- pencils
- glue
- scissors

1 Write.

Growth – Interaction – ~~Movement~~ – Nutrition – Reproduction

Life process	 Plants	 Animals
1 Movement ..... (moving from one place to another)		
2 ..... (reacting and responding to environment)		
3 ..... (producing new plants and animals)		
4 ..... (getting energy from food)		
5 ..... (cells multiply and grow)		

Worksheet 1

2 Cut and stick in the correct place.

Move whole body using legs, wings or arms	Babies grow into adults
React to their environment (temperature, sounds, smells…)	Have babies (viviparous or oviparous)
Seeds grow into plants	Eat plants and other animals
React to light by turning towards it	Produce own food from sunlight
Cannot move, but roots, stems and leaves grow	Many reproduce using seeds that are produced during pollination and fertilisation

Plant image: https://openclipart.org/detail/28782/plant
Animals: https://openclipart.org/detail/220149/african-animals-lineart