My animal Park (Level 3)

Description	Learners will design their own animal park to learn to group animals based on shared characteristics as a way to introduce taxonomy in the animal kingdom.
Leading Question	How would you organize animals in a park/reserve?
Total Time Required	~4.5 - 5 hours total over 4 days
Supplies Required	Paper, color pens, pen/pencil, scissors, glue
Learning Outcomes	1. Literacy: Reading and writing practice 2. Literacy: Develop vocabulary related to animal names and habitats. Learn words such as reserves, sanctuaries, food chain, consumer, producer, predator, prey, herbivore, omnivore, carnivore, adaptation, biomes, decomposition. 3. Biology: Learn about animal classification based on habitats 4. Biology: Learn about the food chain, food webs, and types of consumers 5. Biology: Consider questions related to animal rights and ethics 6. Presentation skills
Required Previous Learning:	• Ability to read and write in the language of instruction or at least be familiar with alphabets • Knowledge of ~20 - 30 animals

Day 1

Today you will learn about the different places animals can live and how to classify them.

Suggested Duration	Activity and Description
10-15 minutes	• Introduction: the purpose of this project is to design an animal park reserve that has animals grouped together based on things they share. The learner must also develop a detailed visitor guide

	describing the animals in her or his park/reserve. The guide will include: - Name of each animal - Type of habitat - Examples of adaptation: features or behavior - Rank in food chain or web: consumer or producer of energy - An example of a food chain or food web in a specific biome in your park or reserve. ● Reflect on why we are designing a park or reserve instead of a zoo: Ask the learner if she or he knows what the differences are between these. You may refer to a national or private animal park or reserve that exists in your country, if applicable. Ask the learner which of the two a zoo or park/reserve they think is better and why. ● In the conversation, explain that: - Animals are caged in zoos and people come watch them. - Animals can also be sold to and by zoos. -In zoos, animals are often confined and do not live in places that resemble their homes in the wild. - Animal parks and reserves are more open for animals and they can walk around freely in places that look like their real homes in the wild. Animals are not sold in reserves or parks and are protected from hunting.
30 minutes	● Learners will generate and write down 20-30 animal names from the following categories: - Pets (3-4 animals) - Domesticated farm animals (3-4 animals) - Forest and jungle dwelling animals (4-5 animals) - Arctic animals (north pole, other cold places) (2-3 animals) - Animals that can live in water and on land (3-4 animals) - Animals that only live in water (3-4 animals) - Animals that can fly (3-4 animals) - Animals that can jump (2-3 animals) - Animals that have horns (2-3 animals) ● Alternatively: if learners find the above too difficult, they can play the following game to think of different animals. - On a piece of paper, the learner will write the alphabet of the language you want her or him to conduct the project in. For example, A-Z - The learner will begin to say the alphabet out loud (e.g.: A, B, C, D, E…) and another will stop him or her at any letter. All players must then come up with an animal name that starts with

	or contains that letter. For example, if the learner is stopped at the letter E, each player must come up with an animal name that begins with or contains that letter (e.g. elephant, snake etc.) - If learners do not know many animals, they can look at appendix 1 and identify an animal whose name contains that letter. -The game can stop when 20-30 animal names have been collected.
20 minutes	● Explain that animals are classified by scientists based on things we observe about them like how their skin or teeth look, where they live, what they eat etc. ● Ask the learner to look at images of different animals and think of how they are similar. Prompts: - What are some animals from our list that are very similar to each other? Why are they similar? Does it have to do with how many legs they have, if they can swim or fly? What are other ways we can compare them? Allow the learner to brainstorm. - What are some animals that are very different? How are they different? - Does the place an animal lives in affect the way it looks or how it behaves? For example, many monkey species have long limbs (like arms and legs) that allow them to live in forests where there are many trees. Because forests are huge and often difficult to navigate, they also developed the ability to locate each other by sound. Explain that these are examples of animal ***adaptation***, and that every animal species has adapted to its environment to allow it to ***survive*** – survival is the goal of every animal species. -What are some examples of adaptation that you can think of?
15-20 minutes	● The learner will brainstorm and write down some examples of adaptation in the animals he or she identified from the earlier game. If the learner is struggling, remind them that: - Every feature in an animal is useful and serves some purpose - Sharp front teeth, called canines, help humans and other animals cut through meat - Think about why fish have gills, birds have wings, and grasshoppers have long legs that allow them to jump quickly? How are these useful for the survival of these animals? ● Other examples of adaptation for reference: - Animals like squirrels and bears that live in very cold places hibernate (or sleep through) the coldest months!

	• Animals in very hot places like camels in deserts can use fat from their bodies to feed themselves, which means they can survive without eating or drinking for weeks! They also don't really sweat!

Day 2

Today you will learn to classify, and group animals based on what they eat!

Suggested Duration	Activity and Description
5-10 minutes	• Learners will learn about some ways to classify and group animals based on what they eat and where they live. • Ask the learner if they know the different places where animals stay? Explain that based on where they stay; animals are classified into: - Terrestrial: animals that live on land e.g., dog, lion, giraffes, etc - Aquatic: animals that live under water e.g., fish, octopus, etc. - Amphibious: animals that live both on land and in water e.g., frogs, crocodiles, tortoises, etc. • Ask the learner if they know what the different types of consumers are? Explain that based on the food they eat; animals are classified into: - Herbivores: animals that eat plants and bacteria only - Omnivores: animals that eat both plants and other animals - Carnivores: animals that eat mainly other animals.
5-10 minutes	• Ask the learner to guess what type of consumer he or she is based on what they eat? Explain that people who are vegetarian and vegan are herbivores, while meat eaters are mostly omnivores! Ask the learner to come up with other examples in each category.
10-20 minutes	• Introduction to the food chain: - Explain that every living thing either eats another living thing or is eaten by another living thing! - Ask the learner to think of a carnivore and something it eats, then think about what that animal eats. - Explain that everything that is eaten is considered energy, and that the food chain shows us how energy is transferred from one living thing to another in the form of food! - Explain that living things can be classified into producers of energy and consumers of energy. Plants produce their own energy from the sun, which is the source of energy. Animals get energy by eating or consuming other plants and animals.

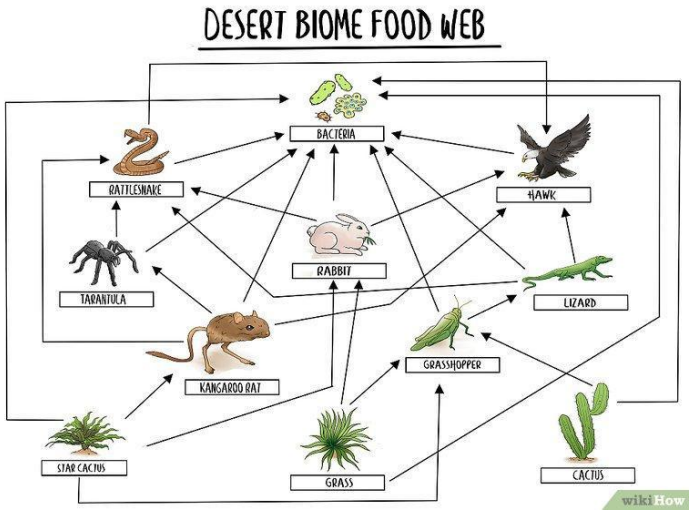
Therefore, the sun is the ***source*** of energy, while plants are ***producers*** of energy and animals are ***consumers*** of energy.

Example:

consumer 2 consumer 1 producer

10-15 minutes

- Food webs
  - Food chains are very simple, but nature is complicated! In nature, many food chains are happening at the same time, which creates a complex web of food chains that depend on each other.
  - Illustrative example: both rabbits and grasshoppers eat grass, then they are eaten by different animals, and in the end, all animals are eaten by bacteria in the soil when they die. This is called ***decomposition***
  - Example of a food web:



Source: https://www.wikihow.com/Draw-a-Food-Web

- Ask the learner if they can identify the different food chains in this food web.
- Explain that the word ***biome*** on the food web means an area that has plants and animals living in it that share some features and have adapted to life in that area. The fish, ocean plants and other animals living in the ocean are a biome. Forest animals and plants are also a biome.

10-15 minutes

- The learner will create a table such as the one below and write down 4-5 habitats in the columns. The learner will then place animals from the list they made yesterday in their appropriate habitat.

- Suggested habitats:
  - Deserts
  - Forests
  - Water body
  - Snowy mountainous area
  - Grassland

  Example:

Category 1: Live in forest	**Category 2: Have 4 limbs**
1. Monkey	1. Cat
2. Bear	2. Lion
3. Animal 3	3. Animal 3
4. Animal 4	4. Animal 4
5. Animal 5	5. Animal 5
6. Animal 6	

10 minutes

Numeracy extension:

Count the number of animals under each category and then compute the percentage of animals of each category that would be in your animal park, using the total number of animals you were able to name yesterday.

Hint: To compute the percentage use:

$$\frac{Number\ of\ animals\ in\ a\ category}{Total\ number\ of\ animals}\ X\ 100$$

Category	Number of animals	Percentage
Live in the forest		
Have 4 limbs		
Total		100%

Day 3

Today you will use your art skills to create your own animal reserve!

Suggested Duration	Activity and Description
40-45 minutes	• Learners will draw each animal on the list he or she made yesterday and make cut outs of the animals using a pair of scissors • *TIP: the learner can look at the animals in the in appendix 1, or any other book, magazine, textbook etc. that contains images of animals*
30 minutes	• The learner will design an animal reserve or jungle using some of the cutouts she or he made (tell the learner that some of the cutouts should be saved for a second activity). • Ask the learner to: - Draw the layout with the different habitats the learner identified in the table they created yesterday. Options include: grassy area, water body or aquarium, desert-like area, forest-like area with trees. Learners can see appendix 2 for ideas - Glue the cut out of each animal where it belongs on the reserve. - Decorate, color etc. to finalize the park or reserve. - Alternative: the learner can also directly draw the animal biomes in their respective habitats instead of gluing cutouts.

Day 4

Today you will finish designing your reserve/jungle, present your reserve/jungle and get feedback about it.

Suggested Duration	Activity and Description
20-30 minutes	• Learners will develop their visitor guide in a notebook or separate pieces of paper where each page is a biome or habitat. The guide must include:

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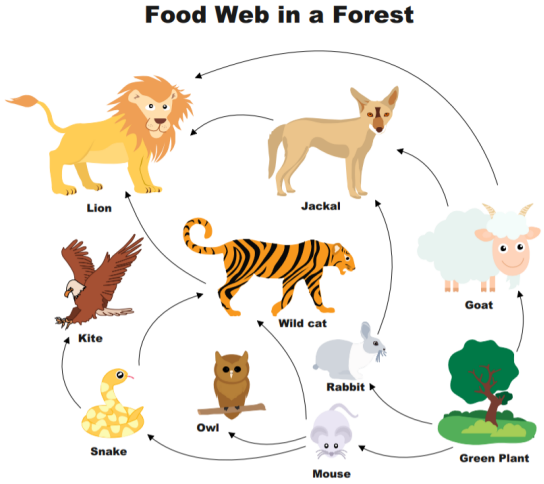
	- Name of each animal - Type of habitat - Examples of adaptation: features or behavior that the animal has that helps it survive in its habitat - Rank in food chain or web: consumer or producer of energy - A well-labeled example of a food chain or food web in a specific biome in your park or reserve.
10-20 minutes	● On a separate large piece of paper or in a different page of the guide notebook, the learner will use the leftover animal cutouts from yesterday's activity (or draw new animals and plants) to make a food chain or web for a specific biome (e.g. desert animals and plants, forest animals and plants): - The learner will glue or draw each living thing in its correct position - The learner will draw arrows clearly indicating the direction of energy transfer from one living thing to another. - The learner will label each living thing as consumer or producer of energy and predator vs. prey Example:  Source: https://www.edrawsoft.com/template-food-web-diagram.php ● Note: Please make sure to label each living thing in the food chain or web (producer vs consumer, predator vs prey)
10-20 minutes	● Learners will present their reserve or jungle to the family and explain:

	- The different types of animal habitats - The names of animals in each habitat and their classification as consumers (herbivores, omnivores, or carnivores) - 2-3 examples of adaptation in each biome.
10-15 minutes	• Parents/Guardians will give feedback on the reserve/jungle design and presentation and revisit the discussion from day 1 around animal parks or reserves and zoos. • Ask the learner: Do you think it's right to put animals in zoos? Why or why not? - Parents may discuss how the best thing for an animal is to be in the wild, but that a park, reserve or sanctuary is better than a zoo because animals are not caged in very small spaces and are put in places that resemble their natural habitats. Explain that many animals are protected from hunting that way
10 minutes	Reflection questions for Day 1-4: Here are some guiding questions to help the student reflect on what they have learnt for the past 4 days. • What did you use to think about zoos before doing this project? What do you think about them now? • What is the most valuable learning from this project? • What are some of the different ways animals are categorized? • How are animals able to adapt to their environment? • What is a food web? How does a food web come about in real life?

Assessment Criteria

- Completed sketch of animal reserve or park with 4-5 different habitats categories and diverse habitats.
- Completed visitor guide and labeled food chain or web
- Presentation: names of animals, animal habitats, animal consumption classification, 2-3 examples of animal adaptation

Additional Enrichment Activities

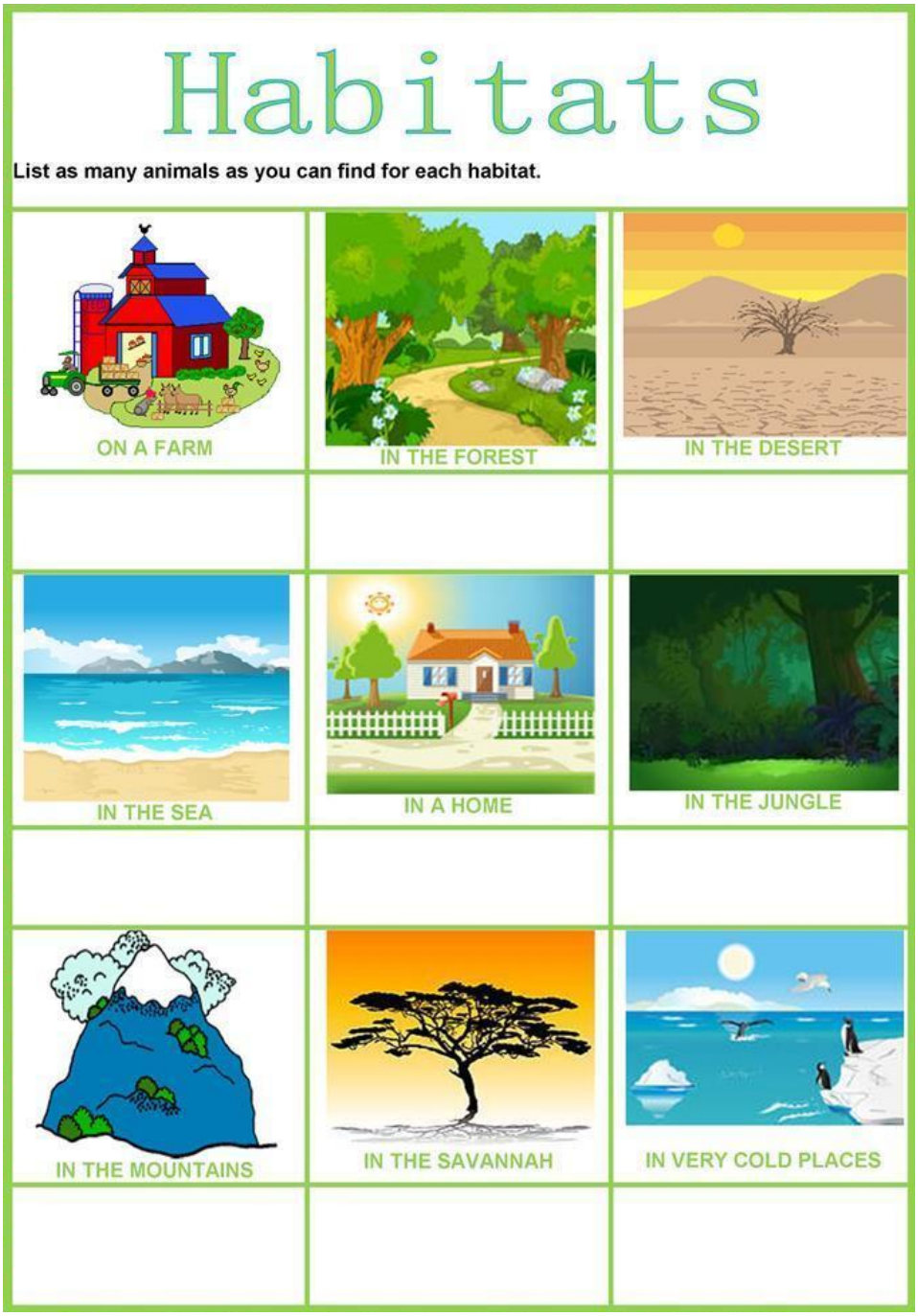
- You can extend the learning from this activity by increasing the number of categories on which learners can compare animals in addition to habitat to include similar features.

APPENDIX 1

EAA welcomes feedback on its projects in order to improve, please use this link: https://forms.gle/LGAP9k17fMyJrKJN7

Source: https://www.eslbuzz.com/learn-english-vocabulary-through-pictures-100-names-of-animals/

APPENDIX 2



Source: https://en.islcollective.com/english-esl-worksheets/material-type/fun-activities-and-games/animals-habitats/108960

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