

Lesson Plan 2

Habitats

CRITICAL OUTCOMES

CO#1: Identify and solve problems in which responses display that responsible decisions using critical and creative thinking have been made.

CO#7: Demonstrate and understanding of the world as a set of related systems by recognizing that problem-solving contexts do not exist in isolation.

LEARNING OUTCOMES

LO#2: The learner will know and be able to interpret and apply scientific, technological and environmental knowledge.

Sub-skills:

- Observation and recall of information
- Understand and use information
- Translate knowledge into new context

ASSESSMENT STANDARDS

Recalls meaningful information when needed

Categorises information to reduce complexity and look for patterns

TEACHING THE LESSON

Review the habitat section through Activity4, page 10, Grade Four Lessons.



ACTIVITY 1 - habitat hoop (adapted from the project wild activity - habitat lap sit)

Get the students into a circle, front to back, and go around naming the students by a habitat necessity: space, water, shelter and food. Tighten the circle until the students are close enough together that they can sit on each other's knees. Remove one student and see what happens to the circle. Remove all the waters and see what happens to the circle. This shows that while all four elements are present there is a balanced environment, a slight decrease in one of the elements results in only a little disturbance, while removing one of the elements results in the collapse of the environment / habitat. The students can be led in a class discussion to achieve this conclusion on their own.



ACTIVITY 2 - habitat match

The region or area that an animal lives in is called its habitat. A variety of different habitats are shown below. Each of these habitats will support a variety of plants and animals. The number and kind of plants and animals that each one supports depends on several factors.

A habitat can contain various amounts of food, water, shelter and open spaces. Since different animals have different needs for each of these factors, each habitat will usually have different animals found in them. Sometimes the same animal will be able to live in different habitats if all of its needs are met.

In addition to the animals needs for these factors, its specific abilities and body type may influence what habitat it lives in.





Savannah



Desert





Wetland



Rain Forest





City



Cultivated Land



Habitat Requirements

Instructions: After studying the provided pictures of five different habitat types, ask the students to decide whether each habitat has LOW, MEDIUM, or HIGH levels of each of the habitat factors. Draw this table on the chalkboard for students to copy into workbook or use attached student worksheet.

Habitat Factors	Savannah	Rain Forest	Wetlands	City	Cultivated Land	Desert
Food						
Water						
Shelter						
Space						

Animal Requirements

Instructions: Review the “cat” facts provided at the beginning of this resource to determine the requirements each of the animals below have for their habitat. After completing the Habitat Requirements table above ask the students to determine the preferred habitat of each cat species. Special factors such as specific abilities and body type may also influence an animal's habitat preference. Draw this table on the chalkboard for students to copy into workbook or use attached student worksheet.

Animal	Food	Water	Shelter	Space	Special factors	Optimum Habitat
Cheetah						
Tiger						
Lion						
Domestic Cat						
Human						

Reflection Questions:

1. Which habitat has the HIGHEST levels of habitat factors? Which one has the LOWEST levels of habitat factors?
2. Which habitat will probably support the most animals? Which habitat will probably support the fewest animals? Why?
3. What other factors (besides those listed in the table) may be important in an animal being present in a particular habitat?
4. What ability do humans have that allows them to take advantage of more than one habitat type?
5. Explain why the cheetah is sometimes out competed by the lion for habitat space.

Background information for question 5:

The cheetah is a non-aggressive cat and avoids confrontation. Their mobility is crucial to their survival and confrontations with other predators could cause injury and jeopardize their survival. With this in mind, cheetah will back down when confronted by a lion, leopard or pack of hyenas. The cheetah often loses its prey or territory to lions and leopards.



ANSWER KEY

Habitat Requirements

Habitat Factors	Savannah	Rain Forest	Wetlands	City	Desert
Food	<i>High</i>	<i>High</i>	<i>Medium</i>	<i>Low</i>	<i>Low</i>
Water	<i>Medium</i>	<i>High</i>	<i>High</i>	<i>Medium</i>	<i>Low</i>
Shelter	<i>Low</i>	<i>High</i>	<i>Medium</i>	<i>High</i>	<i>Low</i>
Space	<i>High</i>	<i>Low</i>	<i>Medium</i>	<i>Low</i>	<i>High</i>

Animal Requirements

Animal	Food	Water	Shelter	Space	Special factors	Optimum Habitat
Cheetah	<i>High</i>	<i>Low</i>	<i>Medium</i>	<i>High</i>	<i>Fast, small mouth, solitary hunter</i>	<i>Savannah</i>
Tiger	<i>High</i>	<i>Medium</i>	<i>High</i>	<i>Low</i>	<i>Large, powerful, solitary, uses camouflage</i>	<i>Rain Forest</i>
Lion	<i>High</i>	<i>Medium</i>	<i>Medium</i>	<i>High</i>	<i>Group hunter; powerful, large mouth</i>	<i>Savannah</i>
Domestic Cat	<i>Low</i>	<i>Low</i>	<i>Medium</i>	<i>Low</i>	<i>Usually depends on human support</i>	<i>City/cultivated land</i>
Human	<i>Medium</i>	<i>Medium</i>	<i>High</i>	<i>Low</i>	<i>Modifies habitats to meet their own needs</i>	<i>Various</i>





WORKSHEET - habitat match

Name: _____ Date: _____

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ASSESSMENT

1	2	3	4
The learner could not categorise the levels of requirements in various habitats and was unable to predict where animals would be found based on these categorizations.	Learner could mostly categorise the level of requirements in the different habitats, but was unable to correctly / logically predict where the animals would be found.	Learner could recall habitat requirements and correctly categorise the level of requirements in the different habitats, and predict where the various animals would be found based on this.	Learner showed a deeper understanding of the activity as shown by the answers given in the reflective questions.



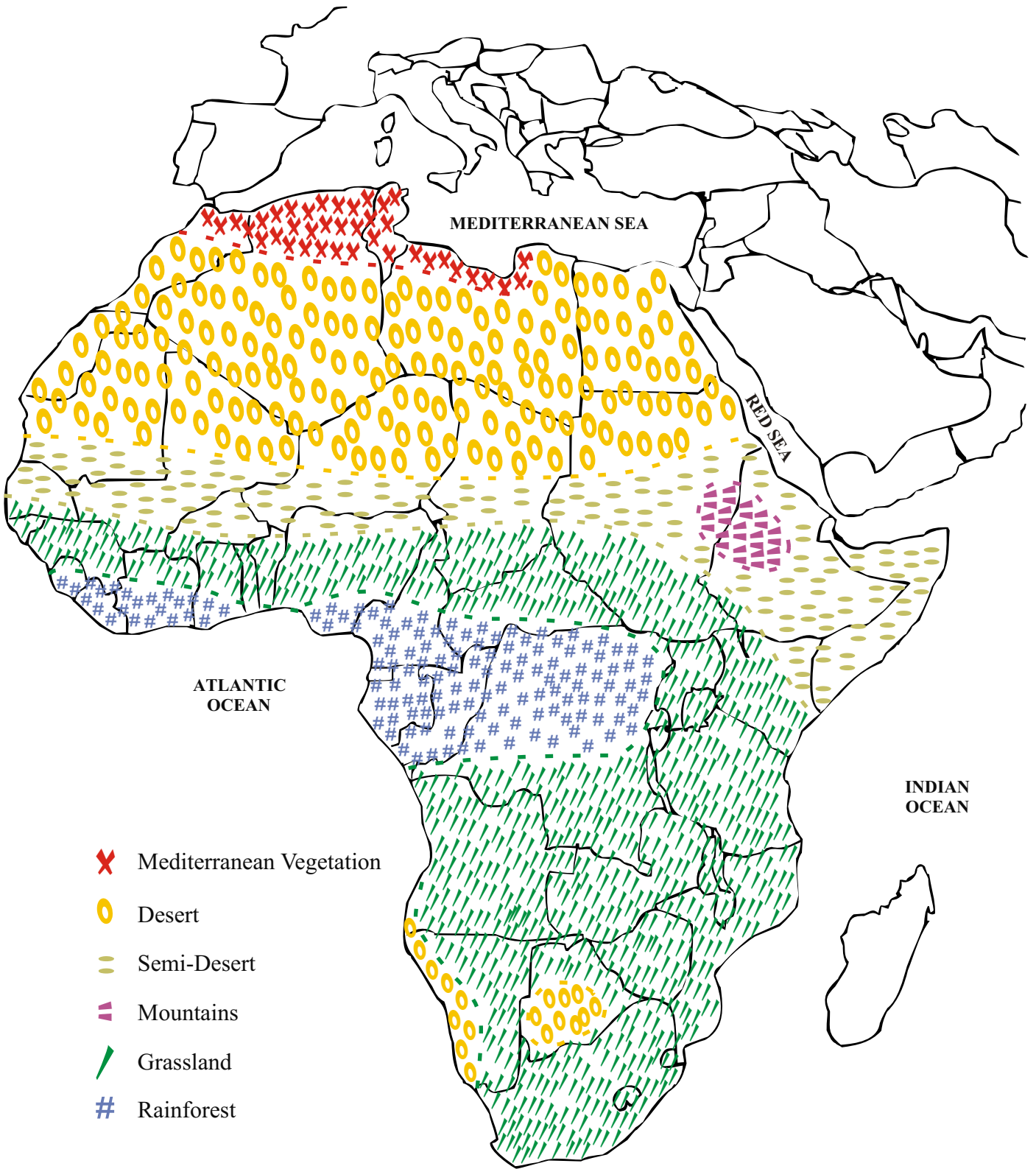
ACTIVITY 3 - cheetah habitat

Using the two maps showing the countries and broad vegetation regions of Africa, brainstorm with the learners where they think cheetahs would live. Have the learners write a list of the countries where they think cheetahs would be found relating to the vegetation found in that country. Using the map in your resource showing distribution of cheetah, indicate to learners on the large map poster the areas that cheetah live in Africa.





BROAD VEGETATIONAL REGIONS OF AFRICA





COUNTRIES OF AFRICA



DISTRIBUTION OF CHEETAH IN AFRICA AND ASIA

