



**pLatform for INnovation in Natural science online  
education**

## Didactic Unit (DU)/Lesson plan

### Life in the Desert

**Contract No.:**

**2022-1-IT02-KA220-SCH-000088667**

**EU-Programme:**

**Erasmus+, KA220-SCH - Cooperation partnerships in school education**

**Authors**

**Newark School (MT)**



**Co-funded by  
the European Union**

LINNEO project has been funded with the support of the European Commission. The responsibility for the content of this publication is borne solely by the publisher; the Commission is not liable for any further use of the information contained therein.

## OVERALL DESCRIPTION

Sections	Description
<b>1. DUs Title</b>	<b>Life in the desert</b>
<b>2. Brief description</b>	<p>This topic relates to the plant world and is taught as part of the science syllabus in Year 5.</p> <p>This DU deals with deserts and dry habitats, their emergence and the different plants growing in this habitat</p>
<b>3. Beneficiaries</b>	Year 5 students aged 8-9 years old. Primary school teachers can utilise this resource for their science lessons
<b>4. Total hours</b>	x3 lessons of 40 minutes each, a total of 120 minutes
<b>6. Aim/s</b>	To learn about desert environments and the different plant species that live in this habitat.
<b>7. Subjects involved</b>	Science and Biology
<b>8. Expected results</b>	Group activity - Chart on a chosen plant species that thrives in the desert

## WORKPLAN

Phase/Title/ Lessons	Brief description	Subjects	Aims	Knowledge and Competences	Educational strategy	Tools and resources	Setting*	Evaluation and assessment	Duration
<b>Lesson 1: Dry habitats</b>	<p>T introduces topic by asking Ss a question: Which environment has very little water and is very difficult to live in? Answer: a desert.</p> <p>T shows Ss a presentation video detailing different dry habitats -Desert, sand dunes and continental dunes, Mediterranean sclerophyllous forests)</p> <p>Using information from the video, Ss work out the first and second exercise from the worksheet.</p>	Science Biology	<p>To recognise what a desert environment contains.</p> <p>To differentiate between different types of dry habitats – desert, sand dunes &amp; mixed forests.</p>	<p>To be able to recognize what a desert environment looks like.</p> <p>To be able to distinguish between different types of dry habitats (Desert, sand dunes and continental dunes, Mediterranean sclerophyllous forests)</p>	Frontal lesson – the teacher is at the front of the class and the students follow the lesson from their desks, using the worksheet provided for the lesson.	<p>Video from LINNEO project <a href="#">Different dry habitats</a></p> <p>Worksheet Dry habitats (annexed)</p>	<p>Physical classroom setting</p> <p>Projector screen</p>	Class correction of worksheet exercises.	40 minutes

	<p>T initiates class correction, class discussion for exercise 3 answers.</p> <p>Lead out question: can you name the type of dry habitat one can find in Europe? Answer: sclerophyllous/mixed forest.</p>								
<p><b>Lesson 2:</b></p> <p><b>How desert environments emerge</b></p>	<p>T introduces lesson by asking Ss: do you think deserts were always deserts? Can a normal environment become a desert? How?</p> <p>T shows students video explaining how deserts emerge.</p> <p>T points out that there are natural and human causes for desertification.</p> <p>T instructs Ss to work out desertification worksheet in pairs. They must fill in each</p>	<p>Science Biology</p>	<p>To understand that a desert environment can emerge from a different type of environment.</p> <p>To understand what causes desertification (human &amp; natural factors)</p>	<p>Collaborative skills when working in pairs.</p> <p>Writing skills.</p>	<p>Directive/ interactive lesson – engaging Ss with videos and opportunities to contribute to class discussions.</p> <p>Collaborative – working in pairs to execute a task.</p>	<p>Video from LINNEO project <a href="#">Desertification</a></p> <p>Worksheet desertification (annexed)</p>	<p>Physical classroom setting</p> <p>Projector screen</p> <p>Whiteboard</p>	<p>Monitoring of group work</p> <p>Class correction of worksheet.</p>	<p>40 minutes</p>

	<p>box with factors leading to desertification (human &amp; natural) using information from the video.</p> <p>Lead out: Mindmap activity - T asks students what we can do to prevent desertification &amp; writes student ideas on the whiteboard.</p>								
<b>Lesson 3: Desert plants</b>	<p>T introduces lesson by reminding students of different dry habitats discussed in previous lessons.</p> <p>T shows video on desert plants – this explains different plant species that survive in the desert (aloe vera, golden barrel cactus, desert ironwood, Mexican firecracker, lamb's ear, Silver torch, Welwitschia, Persian Shallot bulbs)</p>	Science Biology	<p>To understand what plant species are able to live in a dry environment.</p> <p>To explain how certain plants are able to survive in a dry environment.</p> <p>To produce a chart on a selected plant species that</p>	<p>To understand the basic needs of plant life.</p> <p>English Writing skills</p> <p>English Listening skills</p> <p>Collaborative skills for group chart activity.</p>	<p>Directive/ interactive lesson – engaging Ss with videos and opportunities to contribute to class discussions.</p> <p>Collaborative – working in groups of 4 to create a chart.</p>	<p>Video from LINNEO project <a href="#">Desert plants</a></p> <p>Worksheet Desert plants (annexed)</p> <p>Chart material: cardboard paper, markers, pictures of desert plants, scissors, etc.</p>	<p>Physical classroom setting</p> <p>Projector screen</p> <p>Desks must be joined together in groups of 4 students for the group project.</p>	<p>Correction of worksheet exercise – fill in the blanks.</p> <p>Analysis of charts produced by the students.</p>	40 minutes

	<p>T shows the video a second time, this time Ss have to fill in missing information on each plant in the worksheet.</p> <p>Class correction of worksheet.</p> <p>T puts Ss in groups of 4 and instructs them to choose one plant that survives in the desert. They must make a chart about it, explaining how it is able to survive.</p> <p>Lead out: Ss display their charts.</p>		lives in the desert.							
--	---	--	----------------------	--	--	--	--	--	--	--

\*Setting: organisation of classroom space (physical and virtual) functional to the activity, provision of resources (technological and others), management of resources.

# Dry Habitats

## Exercise 1 - Answer True or False.

1. A desert is characterised by a hot climate and a lack of water. \_\_\_\_\_.
2. All dry habitats look the same. \_\_\_\_\_.
3. Nothing can survive in a desert environment. \_\_\_\_\_.
4. In Europe, we do not have any dry habitats. \_\_\_\_\_.
5. Some plants are specially designed to survive dry environments by holding on to water. \_\_\_\_\_.

## Exercise 2 - Circle around the areas where deserts are more common.



## Exercise 3 - Questions:

1. Why do you think these areas contain more deserts?

---

---

2. Why are there less deserts in Europe?

---

---

3. What type of dry habitat can we find in Europe?

---

---

**Exercise 4 - Match the type of dry habitat to its picture.**

Desert •



Sand dune/ continental dune •



Mediterranean sclerophyllous forest •



**Lesson notes: Different dry habitats.**

A desert is a very dry and hot place where it hardly ever rains. Deserts are more common in North America, North Africa and the Middle east, but we still find dry habitats in Europe. There is very little vegetation in desert environments, but some plants such as the Cactus plant that has a thick waxy outer layer to hold water. One can find other dry habitats such as sand dunes and sclerophyllous forests. Sand dunes contain other plants such as Marram grass that has long tough leaves which helps it to survive the shifting sands.





## **Emergence of deserts – Desertification**

### **Natural Causes of desertification**



### **Human causes of desertification**

## Desert Plants

From the information gathered from the video, explain how each plant species is able to survive in the desert.

Aloe vera



Golden barrel cactus



Desert ironwood



Mexican firecracker



Lamb's ear



Silver torch



Welwitschia



Persian Shallot bulbs

