



**Teaching resources - 'Animal Welfare', Experience 2 –
Designing Responsible Habitats (STEM)**

Year(s): 3, 4, 5, 6

Dear teacher,

Thank you for choosing to visit Zoodoo with your class. By selecting this curriculum-aligned learning program, your students will deepen their knowledge of how to care for animals through learning to design habitats that consider welfare. During their visit to Zoodoo, students will learn how animals' physical, environmental, health, behavioural and mental needs help us to design effective habitats. Through this STEM-focused program, students will gain greater appreciation of zoos' role in conservation and will extend this knowledge animals they keep at home and provide better housing conditions for them.

Zoodoo is a signatory to the Zoo and Aquariums Association (ZAA) which aims to enhance animal welfare in zoos/aquariums across the globe through its '5 domains' framework. Zoodoo takes animal welfare seriously and implements it to meet the needs of our animals and show leadership in sharing this knowledge with school communities and the public.

Curriculum outcomes of Zoodoo experience	
Australian Curriculum Content descriptors (Y3-Y6)	<p>Design Technologies:</p> <p>Recognise the role of people in design and technologies occupations and explore factors, including sustainability that impact on the design of products, services and environments to meet community needs (ACTDEK010)</p> <p>Generate, develop, and communicate design ideas and decisions using appropriate technical terms and graphical representation techniques (ACTDEP015)</p> <p>Select and use materials, components, tools, equipment and techniques and use safe work practices to make designed solutions (ACTDEP016)</p>
General capabilities	Critical and creative thinking, literacy, numeracy, (ICT)
UDL provisions	Most tasks allow for multiple modes of interaction (speaking, pointing, using electronic interfaces to record / decode information, writing, reading). Students choose how they want to record their observations and how they will approach the design task.
Other skills enhanced	Communication (presenting), teamwork, knowledge of ethical treatment (animals), STEM fields – particularly science and mathematics

There are three parts to this learning package:

1. A) Teacher information for all phases of the experience (this document, scroll down for further details).
2. B) Behavioural guidelines (access them on the main school excursion web page)
3. C) Printable worksheets for Zoodoo visit and final task (separate documents)

The lesson sequence is structured as follows:

1. **Preparatory lesson (classroom, 2 lessons recommended)** – students will explore how to graphically represent / map their classroom or another enclosed area they are familiar with. This exercise assesses students' design knowledge, allows for early scaffolding, and for determining task readiness.
2. **Zoodoo visit** – Students will attend guided tours and animal presentations and learn how we cater to our animals' needs through the '5 domains' framework and how it links to the habitats these animals are accommodated in. These are led by Zoodoo's educator. Students, in teams, will collect information (worksheets) that will prepare them for the design task.
3. **Concluding lesson (classroom, 3-4 lessons recommended)** – Students will select one of three design tasks, each with varying complexity but catering to different students' interests. With their choice, each team will explore ways to **design a three-dimensional habitat that takes animal welfare into account**. When completed, students will present their designs. The best three voted designs will be displayed on-site at Zoodoo and the winning team only will receive a reward from Zoodoo. Allocating fewer lesson will likely influence the quality of work that is produced.