

## New Zoo

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### 1. Introduction

This exercise was adapted from: Jonathan Osborne, Sibel Erduran, Shirley Simon, *Ideas, Evidence & Argument in Science* (IDEAS), King's College London, 2004, pp. 37-39, <https://www.stem.org.uk/elibrary/collection/3308>, <https://www.stem.org.uk/resources/elibrary/resource/28125/ideas-resources>

The aim of this exercise is to provide an opportunity to students to engage in argumentation about a socio-scientific issue - the funding of a new zoo - and provide justifications for their point of view by doing internet research to construct arguments, justified with evidence, either for or against the new zoo. Section 2 presents the inquiry and Section 3 presents the corresponding argumentation developed with the sInvestigator system.

sInvestigator may be downloaded from <http://lac.gmu.edu/sInvestigator/> The knowledge base containing the argumentation may be downloaded from <http://lac.gmu.edu/sInvestigator/CaseStudies.html>

### 2. Inquiry: Should we have a new Zoo?

To facilitate your Internet research and the development of your argumentation consider the following sets of questions.

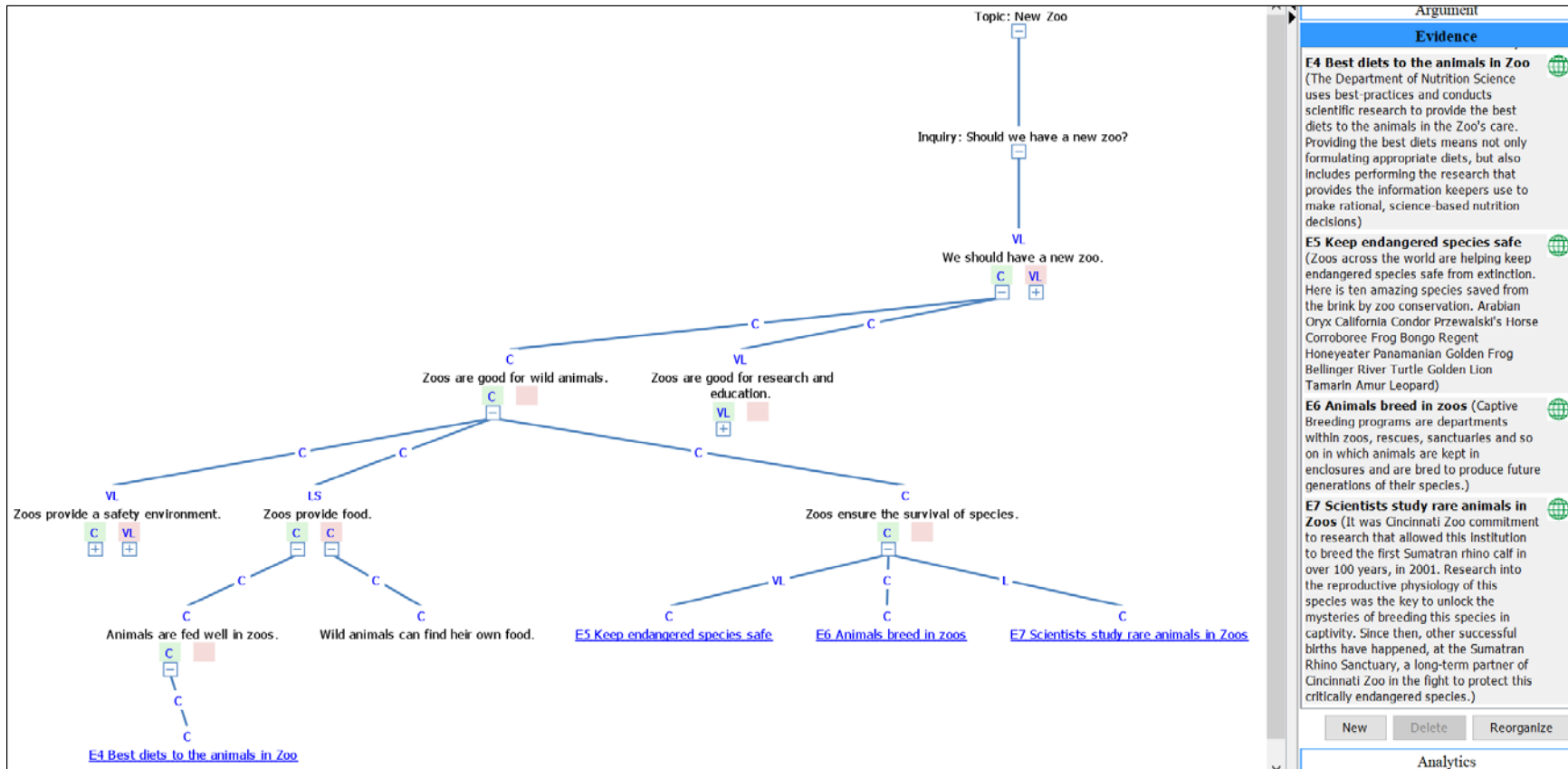
#### *Questions to stimulate agreement with zoos*

- Are wild animals killed by hunters and poachers?
- Are animals in zoos well fed?
- Are animals in zoos safe from predators that want to kill them?
- Do zoos allow you to see a large number of different animals?
- Would animals have become extinct if it wasn't for zoos?
- Can you see wild animals on the television living in their natural homes?
- Do wild animals have to find their own food?
- Can zoos release animals back to the wild?
- Do zoos allow scientists to study rare animals?

#### *Questions to stimulate disagreement with zoos*

- Do animals in the wild have lots of places to live in?
- Is it cruel to keep animals in cages?
- Can wild animals be protected in parks and nature reserves?
- Are wild animals afraid of human beings?
- Can animals be bored and lonely in zoos?
- Can animals breed in zoos?





**Argument**

**Evidence**

**E4 Best diets to the animals in Zoo**  
 (The Department of Nutrition Science uses best-practices and conducts scientific research to provide the best diets to the animals in the Zoo's care. Providing the best diets means not only formulating appropriate diets, but also includes performing the research that provides the information keepers use to make rational, science-based nutrition decisions)

**E5 Keep endangered species safe**  
 (Zoos across the world are helping keep endangered species safe from extinction. Here is ten amazing species saved from the brink by zoo conservation. Arabian Oryx California Condor Przewalski's Horse Corroboree Frog Bongo Regent Honeyeater Panamanian Golden Frog Bellinger River Turtle Golden Lion Tamarin Amur Leopard)

**E6 Animals breed in zoos** (Captive Breeding programs are departments within zoos, rescues, sanctuaries and so on in which animals are kept in enclosures and are bred to produce future generations of their species.)

**E7 Scientists study rare animals in Zoos** (It was Cincinnati Zoo commitment to research that allowed this institution to breed the first Sumatran rhino calf in over 100 years, in 2001. Research into the reproductive physiology of this species was the key to unlock the mysteries of breeding this species in captivity. Since then, other successful births have happened, at the Sumatran Rhino Sanctuary, a long-term partner of Cincinnati Zoo in the fight to protect this critically endangered species.)

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