

For the scenario below identify the **entities**, their **attributes** and **appropriate keys**

### **Finsbury Happy Zoo**

Finsbury Happy Zoo's concept is to show animals together in their habitats. They have a number of **enclosures** of different **habitat types** (such as forest or tundra), **different sizes** (square metres), each having a **main feature** (such as a stream or a cave). Animals of different species share the same enclosure. Each **enclosure has a unique number** and there can be several enclosures with the same **habitat** but with a different main feature or of a different size. Each **animal has a unique ID**, and their **name, date\_of\_birth, diet and description** are stored. When an animal is put in an enclosure, the **start date is recorded**, and if they are transferred to another enclosure **the end date is recorded**. Zoo keepers may need to make a **note** about a particular animal, for example "**not eating well today**" and this is recorded along with **the date**. To make sure the animals don't eat each other a **species compatibility table** is maintained which has the following information; **speciesA, speciesB, compatibility\_rating** (5 for happy neighbours to 1 for bitter enemies). **Species** are identified by their **name**, and a **description of the species and their habitat type** are recorded. Species are matched against enclosures by Zoo staff, and if suitable the maximum number of animals of a particular species for a particular enclosure is recorded to prevent overcrowding.

### **Answer:**

#### **Entity: Enclosure**

Primary key: enclosureID

Attributes: habitatType, size, mainFeature

#### **Entity: Animal**

Primary key: animalID

Attributes: name, DOB, diet, description

#### **Entity: Species**

Primary key: speciesName

Attributes: description, habitatType

#### **Entity: Animal Enclosure**

Foreign key :animalID, enclosureID

Attributes: start\_date, end\_date

#### **Entity: Note**

Primary key: noteID

Foreign key: animalID

Attributes: note\_date, note\_text

#### **Entity: Species Compatibility**

Foreign key: (speciesName)for speciesA, speciesB

Attributes: compatibility rating

**Entity Species Enclosure**

Foreign key: speciesName ,enclosureID

Attributes: max\_animals