

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.

Enclosure (Entity)

Enclosure_ID (Primary key)

Habitat_Type

Size

Main_Feature

Animal (Entity)

Animal_ID (Primary key)

Name

Date_Of_Birth

Diet

Description

Species_Compatibility (Entity)

SpeciesA

SpeciesB

Compatibility_Rating

Animal_Enclosure (Relationship entity)

Animal_ID (Foreign Key)

Enclosure_ID (Foreign Key)

Start_Date

End_Date

Animal_Notes (Entity)

Note_ID (Primary Key)

Animal_ID (Foreign Key referencing Animal)

Note

Note_Date

Enclosure_Species_Capacity (Entity)

Enclosure_ID (Foreign key)

Species_Name (Foreign key)

Max_Animal_Capacity