

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
- Main_Feature
- Size

Animal (Entity)

- Animal_ID (Primary Key)
- Name
- DoB
- Diet
- Description
- Enclosure_ID (Foreign Key)
- Start_Date
- End_Date

Notes (Entity)

- Animal_ID (Foreign Key)
- Zoo_Keeper
- Details
- Date

Compatibility_Table (Entity)

- SpeciesA
- SpeciesB
- Compatibility_Rating

Species (Entity)

- Species_Name (Primary Key)
- Description
- Habitat_Type
- Enclosure_ID (Foreign Key)

Enclosure_Capacity (Entity)

- Species_Name (Foreign Key)
- Enclosure_ID (Foreign Key)
- Maximum_Capacity

