

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.

Entity: Enclosure

Attributes: Habitat types, sizes, main feature, unique number (primary key)

Entity: Animal

Attributes: Unique ID (Primary Key), name, date of birth, diet, description, start date, end date, note

Entity: Compatibility table

Attributes: SpeciesA (foreign key), SpeciesB (foreign key), compatibility rating

Entity: Species

Attributes: Name (primary key), description, habitat type, maximum number, enclosure number (foreign key)