

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 number (Primary key)
- Habitat type
- Size
- Main feature

#### Animal (Entity)

- Animal ID (Primary key)
- Name
- Date of birth
- Start date
- End date
- Diet
- Description

#### Note (Action entity)

- Animal ID (Foreign key)
- Note content
- Date

#### Species Compatibility (Entity)

- SpeciesA
- SpeciesB
- Compatibility rating

#### Species A + Species B – Composite key

#### Species (Entity)

- Name (Primary key)
- Enclosure number (Foreign key)
- Maximum number of animals
- Description

Habitat type