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. Zookeepers 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)
        Unique id (primary key)
        Habitat type
        Main feature
        Size
Animal (Entity)
        Unique id (primary key)
        Enclosure id (foreign key to enclosure)
        Name
        Date of birth
        Diet
        Description
        Species name (foreign key to species)
Animal history(Event Entity)
        Animal id (Foreign key to Animal)
        Enclosure Id (foreign key to Enclosure)
        Start date
        End date
        Primary key (animal id, enclosure id)
Animal note (Event Entity)
        Animal id (foreign key to animal id)
        Note
        Date
        Primary key (anima id, date)
Species (Entity)
        Name (primary key)
```

Description

Habitat type

Species Enclosure (

Species name (foreign key to species) Enclosure Id (foreign key to enclosure)

Max number of animals

Primary key (species name, enclosure id)

## Compatibility (Entity)

Species A (foreign key to species) Species B (foreign key to species) Rating