

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 = 123 (primary key)  
Habitat Type = Forest  
Size (m<sup>2</sup>) = 10  
Main Feature = River

#### Animal (Entity)

Animal ID = 231 (primary key)  
Name = John  
D.O.B = 10/02/24  
Diet = Meat  
Description = Red nose  
Species Name = Mandrill (foreign key)

#### Species (Entity)

Species Name = Mandrill (primary key)  
Description = Biggest monkeys  
Habitat Type = Forest (foreign key)

#### Compatibility (Entity)

SpeciesA = Mandrill (foreign key)  
SpeciesB = Talapoin (foreign key)  
Compatibility rating = 1

#### Keeper Notes (Entity)

Animal ID = 231 (foreign key)  
Note Date = 02/10/2024  
Note = Happy

#### Animal Transfers (Entity)

Animal ID = 231 (foreign key)  
Enclosure ID = 123 (foreign key)  
Start Date = 10/08/2024  
End Date = 10/09/2024

Enclosure Compatibility (Entity)

Enclosure ID = 231 (foreign key)  
Species Name = Mandrill (foreign key)  
Max Animals = 10