

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)

Type

Size

Main Feature

Species (Entity)

Species Name (primary key)

Species Description

Habitat Type

Animal (Entity)

Animal ID (primary key)

Name

Date of Birth

Animal Description

Species Name (foreign key)

Enclosure_Entry (Event entity)

Animal ID (foreign key)

Enclosure ID (foreign key)

Start Date

End Date

Enclosure_Note (Event entity)

Animal ID (foreign key)

Note Description

Date

Compatibility_Table (Entity)

Animal ID 1 (foreign key)

Animal ID 2 (foreign key)

Compatibility Rating

Red denotes an entity, **green** denotes an attribute, and **green** denotes a primary key.