

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

Primary Key: EnclosureID

Foreign Key: AnimalID, species\_name

Attributes: habitat\_type, size, main\_feature

Entity: Animal

Primary Key: AnimalID

Foreign Key: EnclosureID, species\_name

Attributes: name, DOB, diet, description, start\_date, end\_date

Entity: Zoo keepers

Primary Key: KeeperID

Foreign Key: AnimalID

Attributes: note, note\_date

Entity: Species compatibility table

Primary Key:

Foreign Key: speciesA, speciesB

Attributes: compatibility\_rating

Entity: Species

Primary Key: species\_name

Foreign Key: EnclosureID

Attributes: description, habitat\_type, max\_animals