

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.

Candidate Entries & Attributes – Red

Candidate Keys Primary & Foreign (Some not explicitly stated) – Blue

Enclosures – **enclosure ID**, habitat types, habitat size, habitat feature

Animals – **animal ID**, name, date of birth, diet, description,

Animal Locations – **animal location ID**, enclosure ID, **animal ID**, start date, end date

Animal status – **animal status ID**, **animal ID**, note, date

Compatibility – **speciesA**, **species B**, compatibility rating

Species – **species ID**, species Name, description, habitat type

Enclosure Limit – **enclosure limit ID**, enclosure ID, **speciesID**, maximum number of animals