

For the scenario below identify the entities, their attributes and appropriate keys

The Angel Warehouse

The Angel Warehouse stores items for its parent company. The warehouse is organised into **bays**, which are storage areas, but the items themselves are stored in **bins**. Each bay contains a **number of bins**. Each bay is identified by a **unique bay number** and the **bay location** and the **height of the bay** are recorded. Each bin has a different **number** within the bay, always starting with bin no. 1, and while some bays have only 5 bins some have over 50. The **size of each bin** is recorded.

Some bays have a **parking spot** for one fork lift to help move items round the warehouse and lift items into bins. Each **fork lift** is allocated to a bay. Each fork lift has a **unique equipment number** and the **maximum carrying weight** of the fork lift needs to be known. Some fork lifts are **petrol driven** while some are **electric**.

For all bins the **maximum loaded weight** must be known.

When an **item** is taken into the warehouse it is assigned a **unique number** and the **date** is recorded as well as the **item weight**. Bins can store **a number of items** and when an item is put in a particular bin this **date** is also recorded. Items can be moved back and forth between bays and bins to optimise the warehouse storage.

Green = Entities

Red = Attributes

Yellow = Key

Bay/Storage Area

- Unique Bay Number
- Bay Location
- Height of Bay
- Number of Bins
- Parking Spot

Bin

- Bin Number
- Bin Size
- Bin Maximum Loaded Weight
- Number of Items
- Item Date

Forklift

- Unique Equipment Number
- Maximum Carrying Weight
- Petrol Driven
- Electric Driven

Item

- Unique Number
- Date
- Item Weight