

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.

Bay = Entity

Storage areas

A number of bins

Unique bay number

Bay location

Height of the bay recorded

Parking spot for one fork lift

Bin = Entity

Different number (always starting with bin no1)

Size of the bin is recorded

Maximum loaded weight

Can store a number of items

Date is recorded when item is put into

Fork Lift = Entity

Allocated to a bay

Unique equipment number

Maximum carrying weight

Some are petrol driven

Some are electric

Item – Entity

Unique number

Date is recorded

Item weight recorded

Can be moved back and forth between bays

