

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.

Bays (entity):

- Unique bay number (primary key)
- Bay location
- Bay height

Bins (entity):

- Bin number (primary key)
- Bay number (primary key)  
(Composite key)
- Size

Fork lift (entity):

- Equipment number (primary key)
- Bay allocation
- Max carry weight
- Type (electric/petrol)

Items (entity):

- Unique number (primary key)
- Assignment date (entry to warehouse)
- Item weight
- Move date (date moved into current bin)
- Bin number (foreign key)
- Bay number (foreign key)