

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)

No. of Bins = 100  
Bay Number = 32 (primary key)  
Bay location = West wing  
Height of Bay(m) = 3  
Parking spot = Yes

#### Bins (Entity)

Bin No. = 23 (primary key)  
Size of bin (m) = 1  
Maximum loaded weight (kg) = 100  
No. items = 100  
Bay No. = 32 (foreign key)

#### Forklift (Entity)

Bay No. = 32 (foreign key)  
Equipment No. = 2314 (primary key)  
Maximum carrying weight (kg) = 1200  
Fuel = petrol

#### Item (Entity)

Item No. = 324 (primary key)  
Date received = 01/10/2024  
Bin No. = 23 (foreign key)  
Bay No. = 32 (foreign key)  
Date stored = 02/10/2024