

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.

Entity: Bay

Attributes: Unique bay number (primary key), location, height

Entity: Bin

Attributes: Bin number (primary key), bay number (foreign key), size, maximum loaded weight

Entity: Fork Lift

Attributes: Unique equipment number (primary key), maximum carrying weight, petrol driven, electric, bay number (foreign key)

Entity: Item

Attributes: Unique number (primary key), date, weight