

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.

**Entities** are shown in **RED**

**Attributes** are shown in **GREEN**

**Keys** are shown in **BLUE**

#### **Bay (Entity) –**

Bay Number (Key)

Bay Location

Bay Height

#### **Bin (Entity) –**

Bin Number (Key)

Bin Size

Bin Maximum Loaded Weight

#### **Forklift (Entity) –**

Forklift Unique Equipment Number (Key)

Forklift Maximum Carrying Weight

#### **Item (Entity) –**

Item Unique Number (Key)

Item Date

Item Weight

