**sales**

transaction\_id

timestamp

product\_id

category

customer\_type

unit\_price

quantity

total

payment\_type

**sensor\_storage\_temperature**

id

timestamp

temperature

**sensor\_stock\_levels**

id

timestamp

product\_id

estimated\_stock\_pct

This data model diagram shows:

* 3 tables:
  + sales = sales data
  + sensor\_storage\_temperature = IoT data from the temperature sensors in the storage facility for the products
  + sensor\_stock\_levels = estimated stock levels of products based on IoT sensors
* Relations between tables
  + These are shown by the arrows. Make note of the columns that connect the start and end of the arrows, this indicates how you can merge the tables using these linked columns.

***Problem Statement***: Can we accurately predict the stock levels of products based on sales data and sensor data on an hourly basis in order to more intelligently procure products from our suppliers.