## **OBJECTIVE 1: PREPARE THE DATA FOR ANALYSIS**

- 1. Take a moment to familiarize yourself with the data. How many transactions were recorded, over what period of time? What products and product categories were sold?
- 2. Add a new column to calculate Revenue (price \* quantity)
- 3. Add new columns to calculate Month and Day of Week based on the transaction date (BONUS: display them as text (i.e. "Jan", "Feb", "Sun", "Mon"), instead of numerical values)
- 4. Add a new column to extract Hour from the transaction time

## **OBJECTIVE 2: EXPLORE THE DATA WITH PIVOT TABLES**

- 1. Insert a PivotTable on a new tab to show revenue by month.
- 2. Add two more Pivot Tables (on the same sheet) to show the number of transactions by day of week and by hour of day
- 3. Add a PivotTable (on the same sheet) to show the number of transactions by product category, sorted descending by transactions
- 4. Add a PivotTable (on the same sheet) to show the number of transactions and revenue by product type, sorted descending and filtered to the Top 15 (by transactions)

## **OBJECTIVE 3: BUILD A DYNAMIC DASHBOARD**

- 1. Add Pivot Charts to show revenue by month as a line chart, transactions by day of week and hour of day as column charts, and transactions by product category as a bar chart
- 2. Assemble the charts into a rough dashboard layout, and include space for the Pivot Table showing Top 15 product types (you can design your own layout, or follow the solution)
- 3. Add a slicer for store location, and connect it to all of the PivotTables on the sheet Adjust formatting, alignment and polish to finalize the dashboard (TIP: hide the raw PivotTables and remove the worksheet gridlines!)
- 4. Do you notice any interesting patterns or trends? What recommendations might you offer to improve Maven Roasters operations?