Power BI Test Instructions

**Technical Requirements:** Microsoft Power BI Desktop version **2.111.265.0** or greater. Link to download: <https://www.microsoft.com/en-us/download/details.aspx?id=58494>

**Instructions:** This test should take between 0.5-2 hours based on skill level and detail taken to complete. Please follow the 9 steps and **submit in response your PBIX file as well as this word document** with the open response answers.

*Note: We will not be replying with feedback on test results to protect the integrity of the test*

Import data

1. Open new Power BI dashboard and import source tables from ‘PBI Test Source Tables.xlsx’ into Power BI via Power Query Editor. Make any necessary changes to tables.
2. In Power Query, make a new column that will identify the last month in the calendar and adds a label “Current”, and the month before labeled “Prior”. Then all other months use the field ‘Month’. Name the new field “Month Select”

Set up Data Model

1. Define the fact tables and dimension tables:

Fact table: It is a central table in a star schema or snowflake schema that contains quantitative data (metrics) for analysis.

Dimension tables: They contain descriptive attributes (or fields) related to the dimensions of the data in the fact table. These attributes provide context to the facts and are often used for filtering, grouping, and labeling.

**Open Response:** Fact tables: **Sales**  
Dimension tables: **Calendar, Customer, Product, Store**

1. Connect all dimension tables to fact tables

**Open Response:** What keys did you use and explain why you selected the relationship you did?

Answer: Fact table is Sales, its primary key is **ID;** fact table foreign keys create a link between fact table and dimension tables, they are: **ProductID, StoreID, YearWeek** (created from Date)**.**

1. Calculate the net sales $ and net sales quantity

Create visuals

1. Create a dashboard with 4 visuals that shows you a breakdown of net sales $. The 4 visuals are:
   1. Top left, Stacked bar of net sales by store stacked by category
   2. Top right, trend chart of net sales by date
   3. Bottom left, treemap of net sales breaking down key elements of the product in the best way possible
   4. Bottom right, table of all useful data at lowest level of granularity as well as net sales
2. Add a button to toggle between Net Sales $ and Net Sales Qty (label buttons $ and Qty) and replace the net sales $ measure with this dynamic measure in the 4 visuals.
3. Add slicer on “Month Select” to only show current month in all visuals except for trend
4. Add relevant dimension fields to filter pane. Clean up filter pane so it just shows filters on all pages. Color background of filter pane to be light blue.