

1. Open the cleaned data file from the previous Exercise and create a copy (so that you don't overwrite your previous submission). In this copy, delete the working tabs and the answers from Exercise 4, leaving only the cleaned data set you just created. Save the file under `vgsales_clean.xlsx`. This will be your data source from now on.

2. Create a pivot table and place it in a new worksheet.

3. Take a look at the total North American sales by genre.

- What are the total North American sales for all years for Puzzle Games?
- Add "Year" in as a column.
- In which year did Action games have the most sales in North America?
- Remove the "Year" column as you no longer need it.

4. Add slicers for both "Publisher" and "Platform."

- Which publishers have released games for PS4?
- Of the publishers making games for PS4, which one makes the largest number of games on PS4?
- What's the grand total North American sales for all PlayStation consoles (PS, PS2, PS3, PS4)?
- What's Activision's most successful genre for the N64 in North America?

5. Certain game genres are often grouped together in the market or by consumers, for example, action games and adventure games. Treating these two genres as one combined group will help you see how that group behaves as a whole. Create a new genre group called "Action-Adventure" that includes both action games and adventure games.

- What were the total European sales for this new Action-Adventure group in 2010?
- In which year did the Action-Adventure group have the lowest Japanese sales?

6. Count the number of records in this data set for Sports games on the PS4 platform in 2015. How many do you observe?

7. Using the calculated fields functionality, create a new variable, "Japanese Percentage of Global Sales." This variable should measure what percentage of global sales come from Japan.

- For role-playing games by Ghostlight, what percentage of global sales came from Japan?

8. Explore other ways of grouping, filtering, or aggregating the data. Does anything in the data stand out to you? Remember that throughout these tasks you're working towards a presentation for GameCo. Note down anything you find interesting, including why it's interesting. Here are some points you should respond to in your answer:

- Are sales for a particular genre in North America higher or lower than you expected?
- Do any game makers or platforms have fewer game titles than expected?
- Are sales in some years higher or lower than expected?
- Think about how you could dig deeper to turn this into a shareable insight in your final presentation to GameCo.