# Quick Concepts Check Answer Key Exploring Microsoft Excel 2016, Chapter 5

1. **Discuss why a dataset must be sorted by a category before using the Subtotal feature.**  
   If the data are not sorted by a major category, the subtotaled results will not be correct. The Subtotals dialog box uses the *At a change in* setting to indicate how the data are sorted. Excel identifies changes between rows to “know” when to insert a subtotal row.
2. **Describe the two arguments used in the SUBTOTAL function.**Excel uses the SUBTOTAL function to calculate the subtotals using the function you select. The first argument is a value that represents a function. For example, using the value 9 in the first argument calculates a sum. The second argument is a range. The function identified in the first argument is calculated for the range identified by the second argument.
3. **What is the purpose of grouping and outlining columns in a worksheet?**Grouping is helpful to join columns of related data together into a single entity. After you group columns, you can collapse a group to show the outside column and hide the internal columns. Grouping enables you to hide raw data while you focus on key calculated results.
4. **What are the advantages of using a PivotTable instead of a subtotal?**Answers may vary. You can group data into one or more categories and perform a variety of calculations without altering the original dataset, whereas the Subtotal feature inserts subtotal rows within the original dataset. An important benefit of a PivotTable is that it is dynamic: You can easily and quickly *pivot*, or rearrange, the data to see them from different angles, such as expanding or collapsing details, organizing and grouping data differently, and switching row and column categories.
5. **What is the main benefit of creating a PivotTable using Quick Analysis or from the Recommended PivotTables dialog box over creating a blank PivotTable?**  
   Excel displays recommended PivotTables based on the data. The recommended PivotTables contain fields in the ROWS, COLUMNS, and VALUES are to create the PivotTable quickly. If you create a blank PivotTable, you must manually add fields to create the PivotTable. Creating a recommended PivotTable is beneficial when you first start using PivotTables so that you can see potential ways to depict the dataset before starting to create PivotTables from scratch.
6. **Describe the four areas of a PivotTable.**  
   The FILTERS area displays top-level filters above the PivotTable so that you can set filters to dis-play results based on particular conditions you set.  
   The COLUMNS area displays columns of summarized data for the selected field(s).  
   The ROWS area organizes data into categories in the first column based on the selected field(s). The VALUES area displays summary statistics, such as totals or averages, for the selected field(s).
7. **What is the purpose of applying a filter to a PivotTable? What types of filters can you apply?**The PivotTable might contain too much detail. You can apply a filter to include only the values that meet a particular condition. You can set a main filter by dragging a field to the FILTERS area of the Field List and then click the filter arrow in cell B1 to specify the condition(s) you want. You can also apply filters to control data displayed in rows and columns.
8. **What is a slicer? What is the purpose of a slicer?**A slicer is a window containing a button for each unique item in a field. The purpose of a slicer is to enable efficient filtering of data in a PivotTable.
9. **When would you create a calculated field in a PivotTable?**You create a calculated field when the values in the PivotTable do not provide the calculations you need. For example, the original dataset may not provide a percentage increase, so you can create a calculated field to calculate a percentage increase based on the aggregated values.
10. **When is it beneficial to create a relationship between two tables?**Creating a relationship between two tables is beneficial when both tables have a common field, such as the IDs for sales representatives. Once the relationship is created, you can create a PivotTable that extracts data from both tables to create a more robust PivotTable to analyze the combined data.
11. **What PivotTable areas are used to create the elements in a PivotChart?**The field used for the COLUMNS area in a PivotTable is used to create the legend in a PivotChart. The field used for the ROWS area in a PivotTable is used to create the category axis in a PivotTable. The field used for the FILTERS area remains a field to use to filter data within the PivotChart. The field used for VALUES in a PivotTable remains a field that builds the plot area within the PivotChart.
12. **What happens when you set filters and change fields used in a PivotChart?**If you set filters or change fields in a PivotChart, the changes always impact the PivotTable.