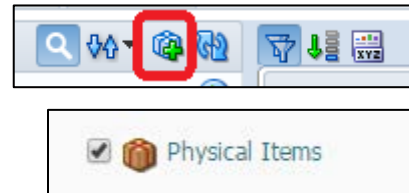


## Lesson 13: Combining Subjects

When we've created queries so far, we have used a single subject area, such as Fulfillment or Physical Items. Queries made from a single subject perform better and are easier to maintain. It is possible to combine different subject areas for a single report, however it has some limitations.

Create a new query using the Fulfillment subject. To add another subject, look on the left side and you can see a green plus sign, which stands for "Add/Remove Subject Areas." Select the other subject area of interest, in this case Physical Items.

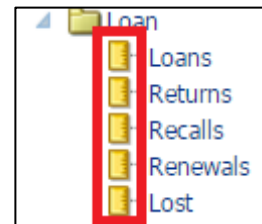


You can see that both the Fulfillment subject and the Physical Items subject are available.

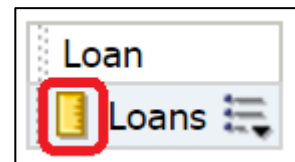


Now, some vocabulary.

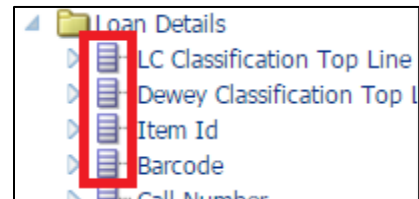
When you expand Fulfillment>Loan you can see that each field has a yellow page or rectangle. If you look closely, it's supposed to be a ruler. That's because those are called measurements. Measurements are found in the first yellow folder in the subject. Any folder with a measurement (a yellow ruler) in the beginning of the tree is a fact or a fact table. The Loan folder is also called the Loan fact table. Measurements can almost always be included in cross-subject queries.



When you drag and drop Loans into the Selected Columns panel it retains the yellow ruler indicating that it is a measurement. Loans is a measurement for the total number of checkouts.



To compare, if you open the Loan Details folder, there are no measurements. All the fields in that dimension are called descriptions. Descriptions are found in dimensions or dimension tables. The Loan Details folder is a dimension table, or a dimension, and includes descriptions.



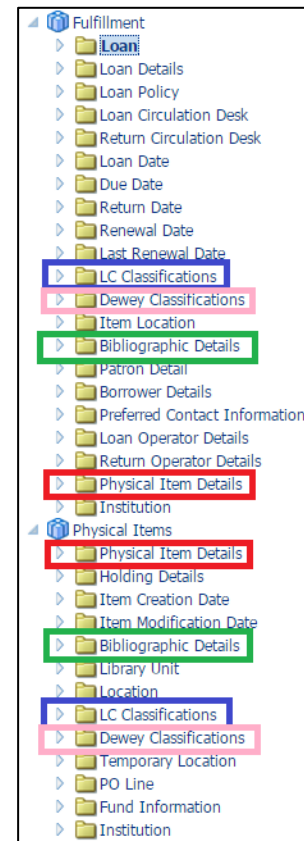
Notice the rest of the yellow folders in Fulfillment and in Physical Items. Some of them are the same. We can see that LC Classifications, Dewey Classifications, Bibliographic Details, and Physical Item Details are common (shared) dimensions for the subjects Fulfillment and Physical Items.

First we will add Fulfillment>Borrower Details>User Group.

Then we will add Bibliographic Details>Title.

Then we will add a measurement, Fulfillment>Loan>Loans.

Filter Loans to be greater than 1 and look at the results.



You can report on measurements from multiple facts where all dimensions that are used in the analytic are shared.