This QuILT starts with a pre-test, warm-up and a post-test for a single spin-1/2 system as a review for product spaces, with an emphasis on addition of angular momentum. The product space QuILT focuses on the preliminaries, e.g., the dimensionality of the product space, how to choose a complete set of basis vectors for the product space, and how to use these basis vectors to calculate the matrix elements for an operator and construct an operator matrix. The QuILT focuses on helping students learn about the uncoupled and coupled representations relevant for addition of angular momentum addition, spin-orbit interactions, etc.  However, the QuILT does not teach them how to transform from one representation to another. This is because during the investigation of difﬁculties we found that most students were struggling with the preliminaries and those who learned the preliminaries were able to comprehend the treatment in the common textbooks about how to change basis using Clebsch-Gordon tables.  Please see a publication describing our findings at <https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbnxwcm9mZXNzb3JzaW5naHN3ZWJwYWdlfGd4OjY3Y2RlZmRlNDJlOTIwZWM>