Uses of Computation in Scientific Investigations:

To collect, organize, analyze, and share data

To develop and run models

To graph, visualize, and represent data

To compare (fit) data to one or more models

To solve mathematical equations quickly, accurately, and efficiently

As part of analysis, to compute measures (averages variances, deviations, errors, other statistical tests)

To simulate a process, generate "randomness" and examine possibilities

To search and research, information "discovery"

To collaborate and communicate

To present the results of one's work

To remove tedious and repetitious, time-consuming work