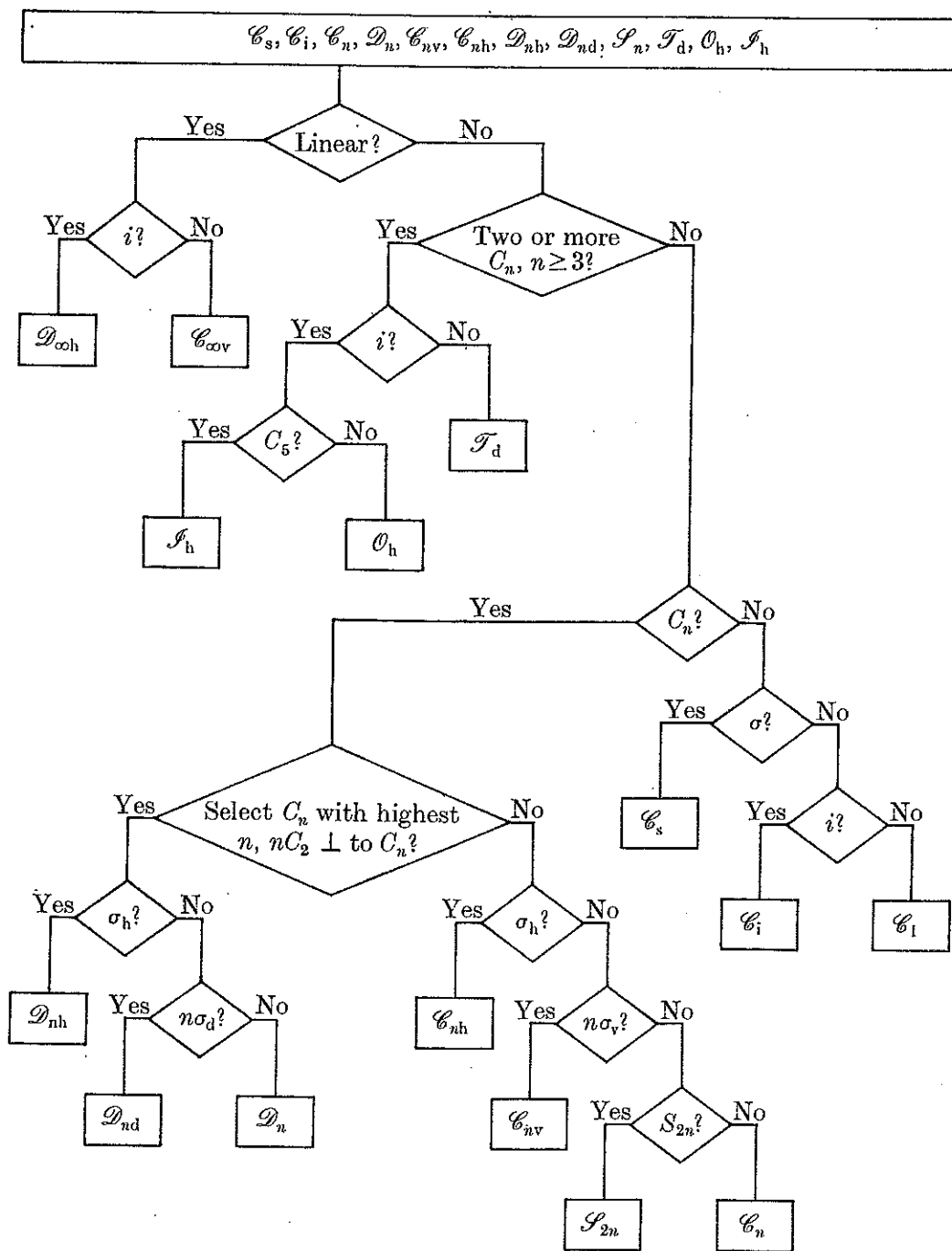


TABLE 3-7.1
A flow chart for determining the point group of a molecule



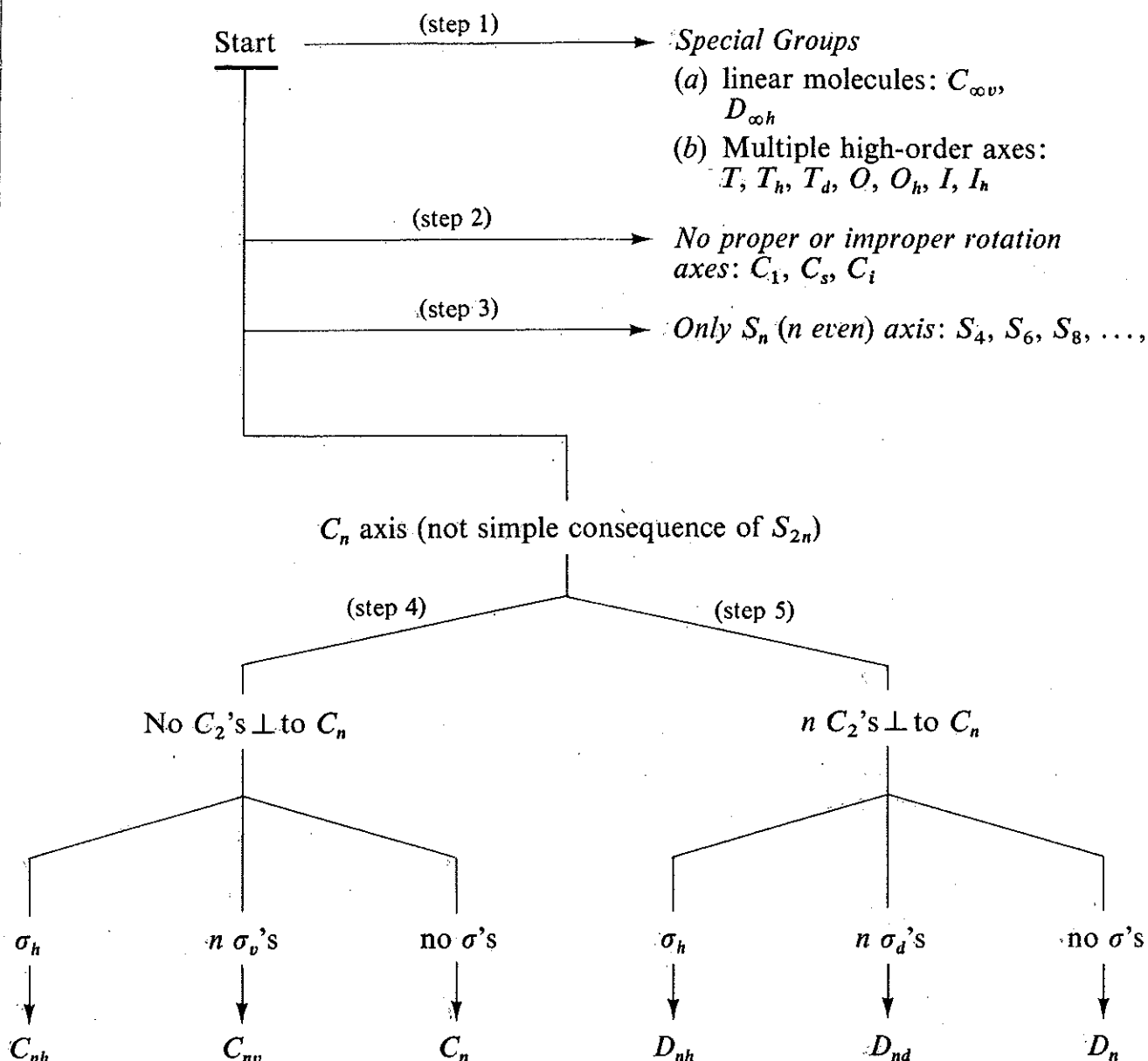


Figure 3.3 A five-stage procedure for the symmetry classification of molecules.

3.14 Illustrative Examples

The scheme just outlined for allocating molecules to their point groups will now be illustrated. We shall deal throughout with molecules which do not belong to any of the special groups, and we shall also omit molecules belonging to C_1 , C_s , and C_i . Thus, each illustration will begin at step 3, the search for an even-order S_n axis.

Example 1. H_2O

- H_2O possesses no improper axis.
- The highest-order proper axis is a C_2 axis passing through the oxygen