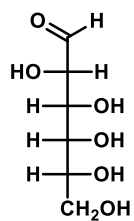
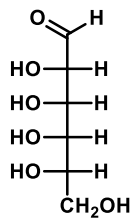


1. **Drawing Carbohydrates.** Fill in the boxes below with the correct pyranose structure of each of the following 6-carbon monosaccharides.

*D-Altrose* α -D-Altopyranose

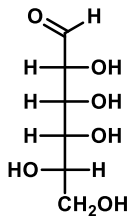
Haworth Projection

Chair Structure

*L-Allose* β -L-Allopyranose

Haworth Projection

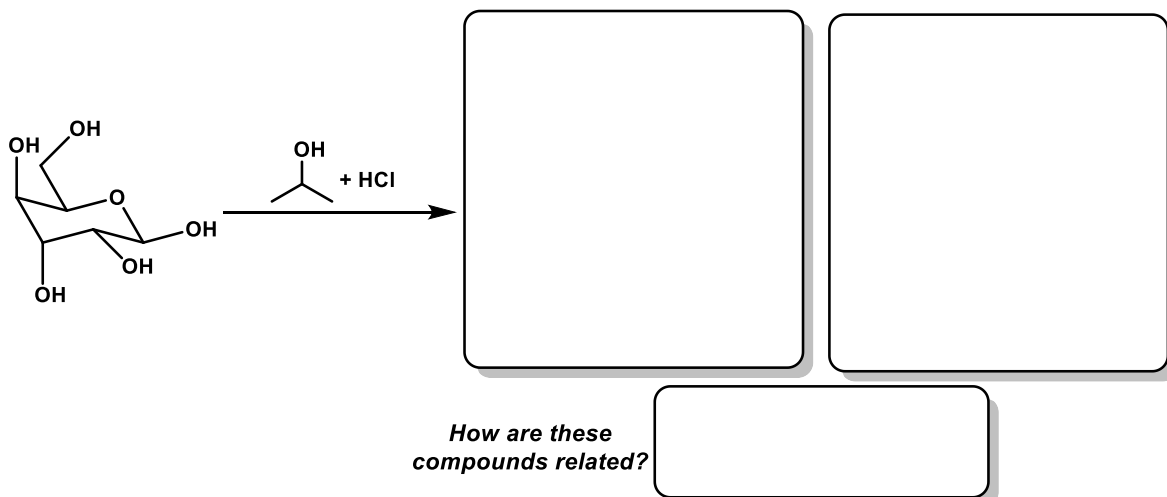
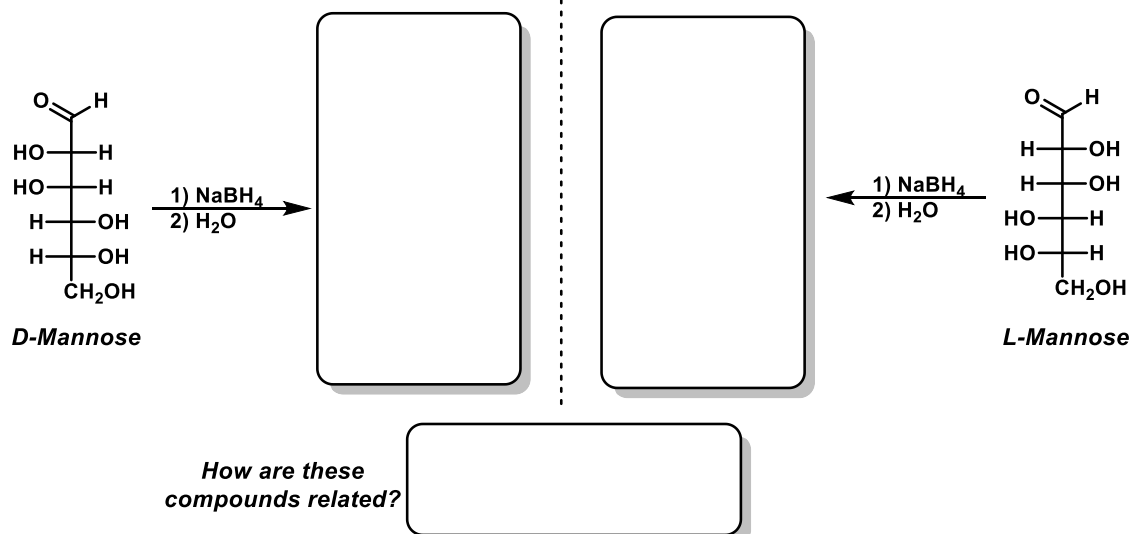
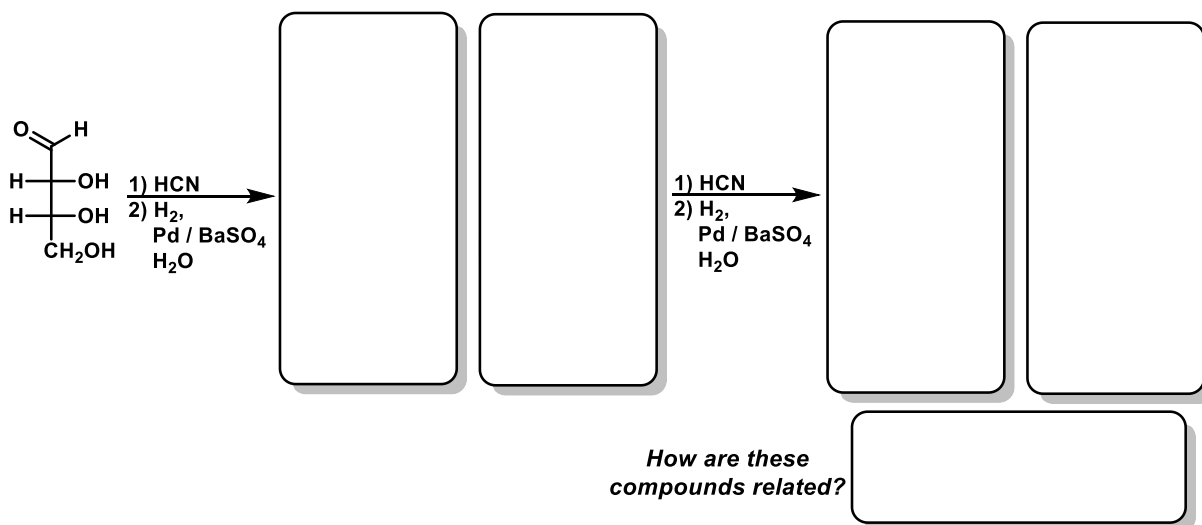
Chair Structure

*L-Talose* α -D-Talopyranose

Haworth Projection

Chair Structure

2. **Carbohydrate Reactivity.** Fill in the boxes with the correct products for each reaction. Then choose one word to describe how the compounds indicated are related.



3. **Cumulative Synthesis (with Exam 1 reactions).** Fill in the boxes below to complete the synthesis as well as the 3D chair structure of the starting material.

