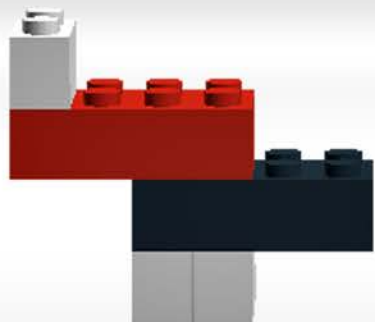
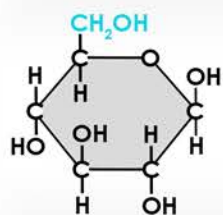
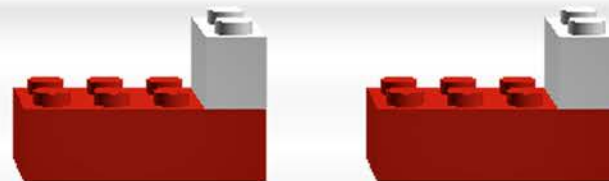
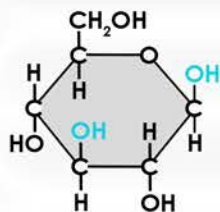


# Layout Mat for Glucose Parts

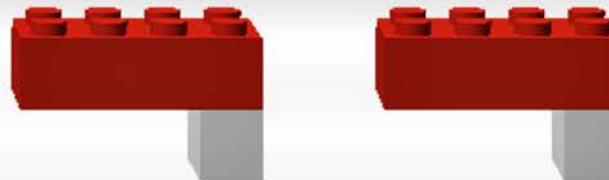
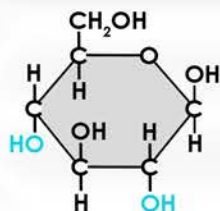
**Directions:** Build each part and place it below. Check that the shape exactly matches the picture. Leave them on top of their pictures until needed. Continue with step 2 on *Card A: Making Glucose Molecules*.



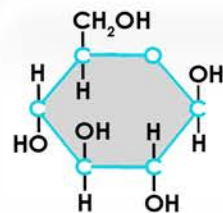
1  $\text{CH}_2\text{OH}$  group



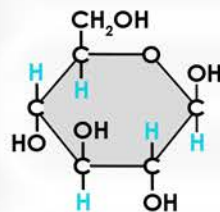
2  $\text{OH}$  groups with H pointing up



2  $\text{OH}$  groups with H pointing down

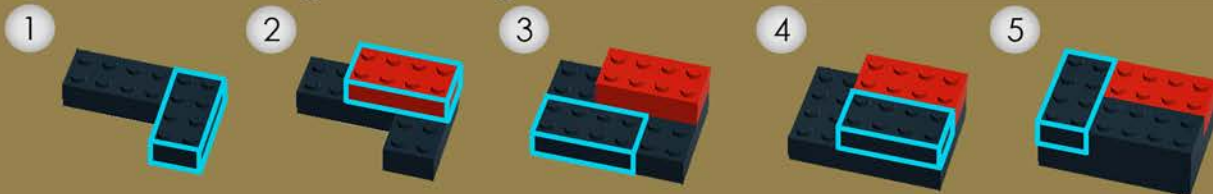


glucose ring structure



5  $\text{H}$  atoms

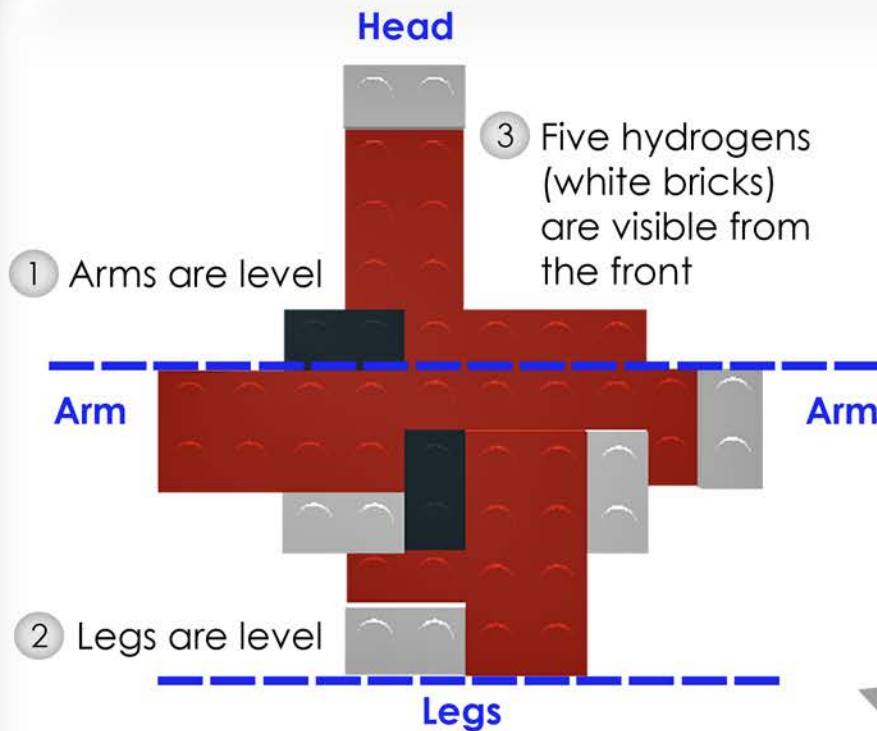
How to build the glucose ring structure:



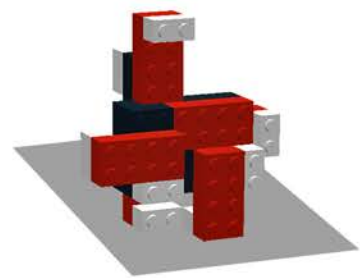
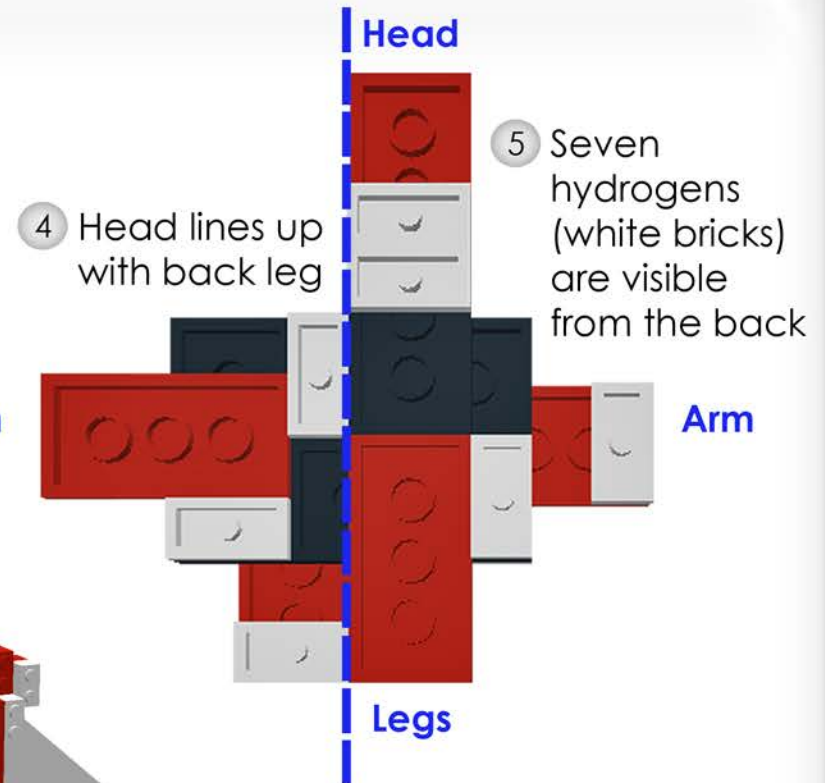
# Glucose Check Mat

**Directions:** Check all six items to finish your glucose molecule. It should look like the pictures below.

## Front View

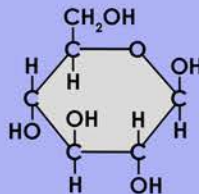


## Back View



6 Stand your glucose molecule on its legs

Glucose has 6 carbons, 12 hydrogens, and 6 oxygens. Here are two other ways chemists model glucose:



Every carbon atom has an H attached and an OH or CH<sub>2</sub>OH group attached.

**Congratulations! You made a LEGO® glucose molecule!**