Adv Chem/IB Chem II: Isomers worksheet Name:

A. Draw all of the possible constitutional isomers of the following molecular formulas. The correct number of isomers is given in parenthesis.

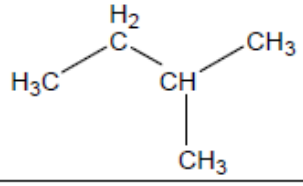
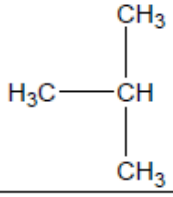
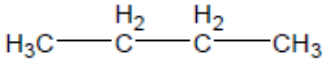
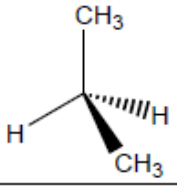
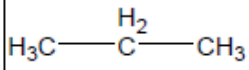
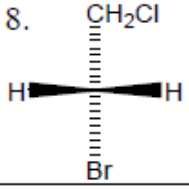
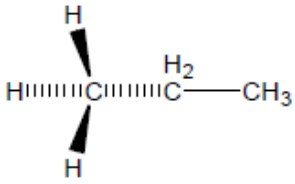
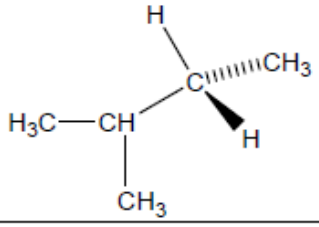
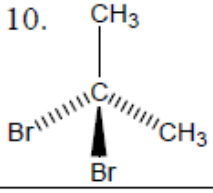
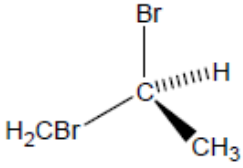
1. C_3H_8O (3)

2. $C_3H_5Cl_3$ (5)

3. Draw all the ketones that have formula C_4H_6O. (3)

4. Draw all of the amines where the nitrogen is attached to one primary carbon with the formula $C_5H_{13}N$. (4)

B. What is the relationship between each of the following pairs of structures? Are they totally *different* molecules (i.e., which do not have the same molecular formula), are they *constitutional isomers*, or are two drawings of the *same* compound?

5. C_4H_{10}	
6. 	
7. 	
8. 	CH_3-CHClBr
9. 	
10. 	
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