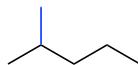


## Constitutional Isomers of C<sub>6</sub>H<sub>14</sub>



**6 carbon chain**

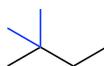
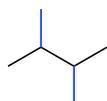
Transformation  
TUTORING



**5 carbon chain**

You can add the extra carbon to the second or third carbons.  
Note: Adding the extra carbon to second carbon from either end results in the same molecule!

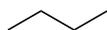
Transformation  
TUTORING



**4 carbon chain**

You can add the two extra carbons on the second and third carbons of the parent chain or both on the second carbon.

## Constitutional Isomers of C<sub>4</sub>H<sub>10</sub>



**4 carbon chain**

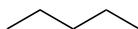


**3 carbon chain**

You can add the extra carbon to the second carbon on the chain.

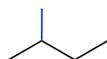
Transformation  
TUTORING

## Constitutional Isomers of C<sub>5</sub>H<sub>12</sub>



**5 carbon chain**

Transformation  
TUTORING



**4 carbon chain**

You can add the extra carbon to the second carbon on the chain.  
Note: Adding the extra carbon to second carbon from either end results in the same molecule!

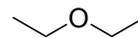
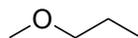
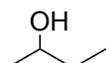
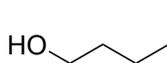


**3 carbon chain**

You can add the extra two carbons to the central carbon.

Transformation  
TUTORING

## Constitutional Isomers of C<sub>4</sub>H<sub>10</sub>O

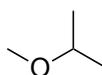
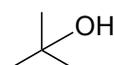
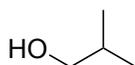


Transformation  
TUTORING

**4 carbon chain**

You can add OH either to the first or second carbon. You can also add oxygen in between carbons to make two different ethers.

Transformation  
TUTORING



**3 carbon chain with one carbon added as a methyl group to the middle carbon**

You can add OH either to the first or second carbon. You can also add oxygen in between carbons.

## Constitutional Isomers of C<sub>4</sub>H<sub>9</sub>Br



Transformation  
TUTORING

### 4 carbon chain

You can add bromine to the first or second carbons.

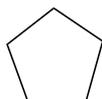


Transformation  
TUTORING

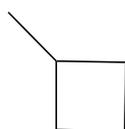
### 3 carbon chain

You can add the extra carbon as a methyl group to the middle carbon. Bromine could be added to the first or second carbons

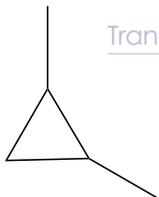
## Draw the 5 Constitutional Isomers of C<sub>5</sub>H<sub>10</sub> That Contain One Ring



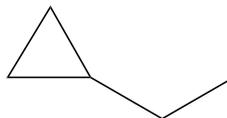
Transformation  
TUTORING



Transformation  
TUTORING

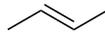
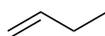


Transformation  
TUTORING



## Constitutional Isomers of C<sub>4</sub>H<sub>8</sub>

Transformation  
TUTORING



### 4 carbon chain

You can add a double bond between first and second or second and third carbons.

Transformation  
TUTORING



### 3 carbon chain

You can add the extra carbon as a methyl group to the middle carbon.

You can add double bond between any two carbons.



### rings

You can make a ring made of 4 carbons or a three carbon ring with another carbon attached as a methyl group.

Transformation  
TUTORING

