CONCEPT: INTRO TO REDOX REACTIONS

Identifying Redox Reactions

- Recall, **redox reactions** (oxidation-reduction reactions) involve transference of an electron(s) between reactants.
 - □ In organic chemistry, redox reactions involve ___ or ___ the oxygen or hydrogen amount on a molecule.
 - Oxidation: the number of bonds on the molecule.
 - Reduction: ____ the number of _____ bonds on the molecule.

Oxidation vs Reduction

Oxidation

OH

$$H = C + H$$

Reduction

EXAMPLE: Determine if the following reaction represents an oxidation or reduction reaction.

$$\begin{array}{ccc} & \text{OH} & & \text{O} \\ | & & | \\ \text{H}_3\text{C}-\text{CH}-\text{CH}_2\text{CH}_2\text{CH}_3 & \longrightarrow & \text{H}_3\text{C}-\text{C}-\text{CH}_2\text{CH}_2\text{CH}_3 \end{array}$$

PRACTICE: Determine if the following reaction represents an oxidation, reduction or neither.

$$\bigcirc \longrightarrow \bigcirc$$

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