Lesson: Introducing Covalent Bonds 2: Relating Bond Length to Bond Strength

First, read the statements below.

Second, watch the explore video Alef

Third, decide whether each of the statements below is True or False

True (T) or False (F)?

1. The distance between the two atomic nuclei **influences** the strength of a covalent bond. _____
2. The **bond dissociation energy** is the optimal distance between the nuclei of two bonded atoms where the attractive forces are at a maximum. _____
3. The bond length between two bonding atoms depends upon the: sizes of the atoms and number of shared electron pairs. _____
4. The **bond length** of a covalent bond is the energy required to break a particular covalent bond. _____
5. Energy is released from the **formation of bonds** in the products. _____
6. An **exothermic reaction** is a chemical reaction where more energy is released by formation of bonds in the products than is required to break bonds in the reactants. _____

LIVEWORKSHEETS