

Homework 1: Calculating Enthalpy Change from Bond Energies

Use the table below to answer the following questions.

Table 1 Average Bond Energies (kJ/mol)

Bond	Energy
H-H	432
H-F	565
C-H	413
C-O	358
C≡O	1072
C-C	347

Bond	Energy
F-F	154
O-H	467
C=C	614
C=O	745
C=O (for CO ₂ (g))	799
O=O	495

Calculate the enthalpy change from bond energies for each of these reactions:

