

NAME: _____ DATE: _____

5.3-1 Calculating Enthalpy Change from Bond Energies

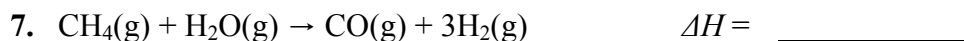
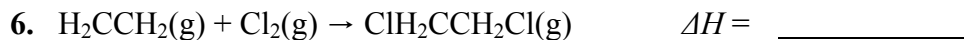
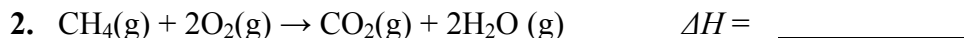
Use the table below to answer the following questions.

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
C-Cl	339

Bond	Energy
F-F	154
O-H	467
Cl-Cl	239
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:



NAME: _____ DATE: _____

5.3-1 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
C-Cl	339

Bond	Energy
F-F	154
O-H	467
Cl-Cl	239
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:

