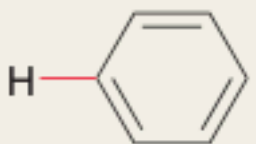
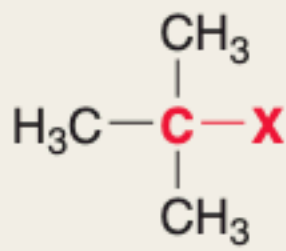
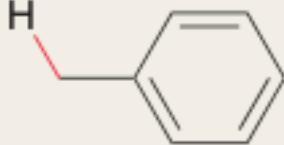


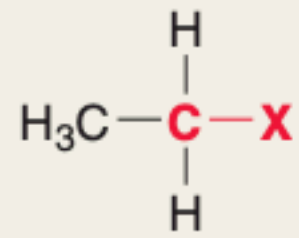
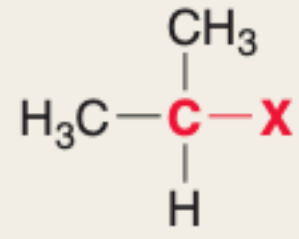


TABLE 6.1 BOND DISSOCIATION ENERGIES (ΔH°) OF COMMON BONDS

	KJ/MOL	KCAL/MOL		KJ/MOL	KCAL/MOL		KJ/MOL	KCAL/MOL
Bonds to H			$\text{H}_2\text{C}=\text{CH}-\text{CH}_3$	385	92	$(\text{CH}_3)_2\text{CH}-\text{F}$	444	106
$\text{H}-\text{H}$	435	104	$\text{HC}\equiv\text{C}-\text{CH}_3$	489	117	$(\text{CH}_3)_2\text{CH}-\text{Cl}$	335	80
$\text{H}-\text{CH}_3$	435	104				$(\text{CH}_3)_2\text{CH}-\text{Br}$	285	68
$\text{H}-\text{CH}_2\text{CH}_3$	410	98	Bonds to methyl			$(\text{CH}_3)_2\text{CH}-\text{I}$	222	53
$\text{H}-\text{CH}(\text{CH}_3)_2$	397	95	CH_3-H	435	104	$(\text{CH}_3)_2\text{CH}-\text{OH}$	381	91
$\text{H}-\text{C}(\text{CH}_3)_3$	381	91	CH_3-F	456	109			
	473	113	CH_3-Cl	351	84			
	356	85	CH_3-Br	293	70	$(\text{CH}_3)_3\text{C}-\text{H}$	381	91
	464	111	CH_3-I	234	56	$(\text{CH}_3)_3\text{C}-\text{F}$	444	106
	364	87	CH_3-OH	381	91	$(\text{CH}_3)_3\text{C}-\text{Cl}$	331	79
$\text{H}-\text{F}$	569	136				$(\text{CH}_3)_3\text{C}-\text{Br}$	272	65
$\text{H}-\text{Cl}$	431	103	$\text{CH}_3\text{CH}_2-\text{H}$	410	98	$(\text{CH}_3)_3\text{C}-\text{I}$	209	50
$\text{H}-\text{Br}$	368	88	$\text{CH}_3\text{CH}_2-\text{F}$	448	107	$(\text{CH}_3)_3\text{C}-\text{OH}$	381	91
$\text{H}-\text{I}$	297	71	$\text{CH}_3\text{CH}_2-\text{Cl}$	339	81	X—X bonds		
$\text{H}-\text{OH}$	498	119	$\text{CH}_3\text{CH}_2-\text{Br}$	285	68	$\text{F}-\text{F}$	159	38
$\text{H}-\text{OCH}_2\text{CH}_3$	435	104	$\text{CH}_3\text{CH}_2-\text{I}$	222	53	$\text{Cl}-\text{Cl}$	243	58
C—C bonds			$\text{CH}_3\text{CH}_2-\text{OH}$	381	91	$\text{Br}-\text{Br}$	193	46
CH_3-CH_3	368	88				$\text{I}-\text{I}$	151	36
$\text{CH}_3\text{CH}_2-\text{CH}_3$	356	85	$(\text{CH}_3)_2\text{CH}-\text{H}$	397	95	$\text{HO}-\text{OH}$	213	51
$(\text{CH}_3)_2\text{CH}-\text{CH}_3$	351	84						