Symmetry
(C$_{2h}$)
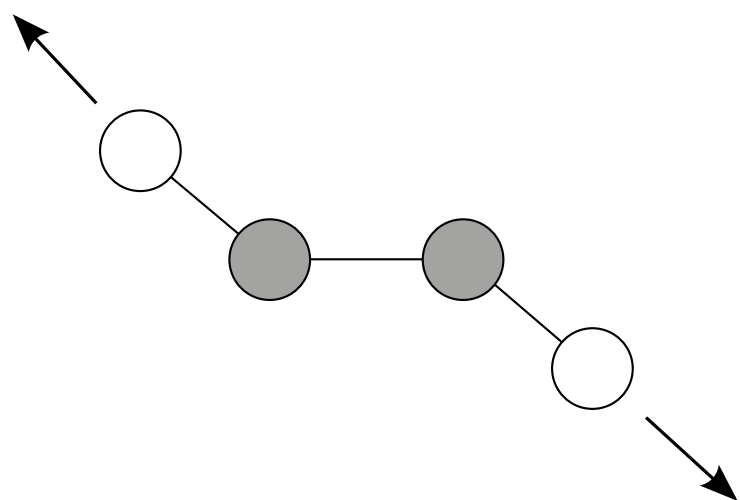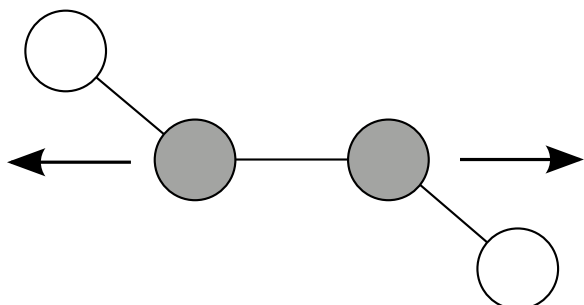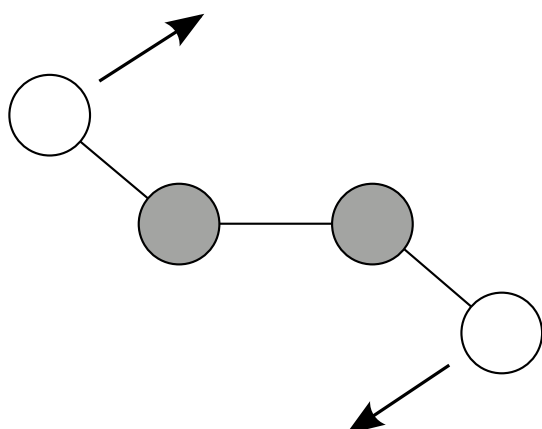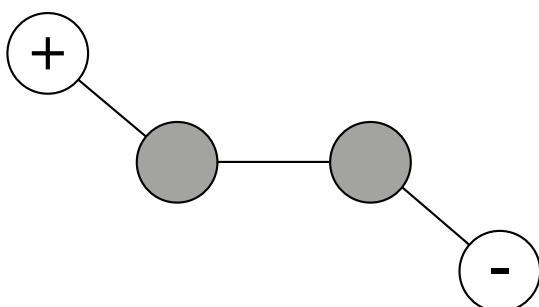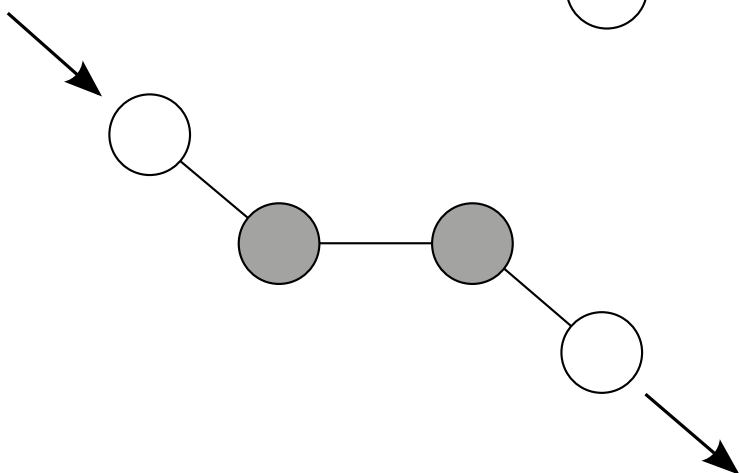
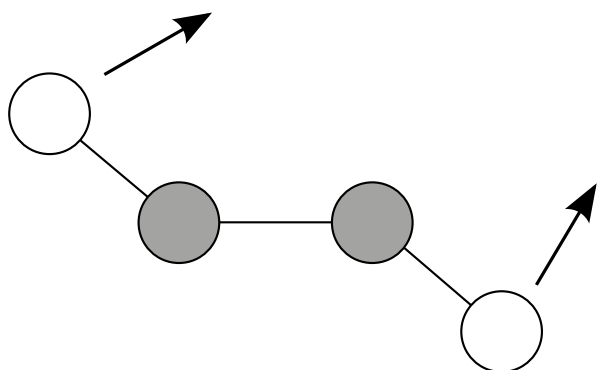|	Mode		Description
	ν_1	a_g	symmetric C-H stretch
	ν_2	a_g	symmetric C-C stretch
	ν_3	a_g	symmetric in-plane bend *trans* bend
	ν_4	a_u	torsion
	ν_5	b_u	antisymmetric C-H stretch
	ν_6	b_u	antisymmetric in-plane bend "*cis*" bend