

## Character Tables - Point Groups $C_{2v}$ and $T_d$

$C_{2v}$	$E$	$C_2$	$\sigma_v(xz)$	$\sigma_v'(yz)$	
$A_1$	1	1	1	1	$z, x^2, y^2, z^2$
$A_2$	1	1	-1	-1	$xy$
$B_1$	1	-1	1	-1	$x, xz$
$B_2$	1	-1	-1	1	$y, yz$

$T_d$	$E$	$8C_3$	$3C_2$	$6S_4$	$6\sigma_d$	
$A_1$	1	1	1	1	1	$x^2 + y^2 + z^2$
$A_2$	1	1	1	-1	-1	
$E$	2	-1	2	0	0	$(2z^2 - x^2 - y^2, x^2 - y^2)$
$T_1$	3	0	-1	1	-1	
$T_2$	3	0	-1	-1	1	$(x, y, z), (xy, xz, yz)$