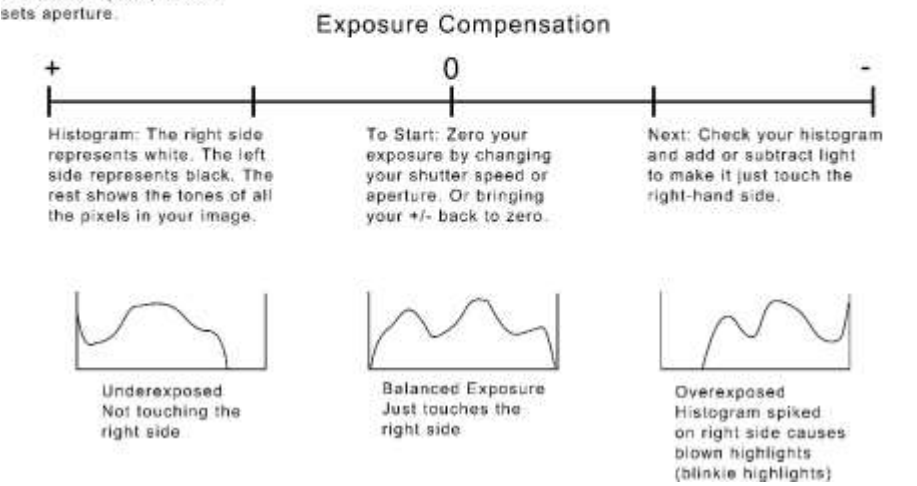
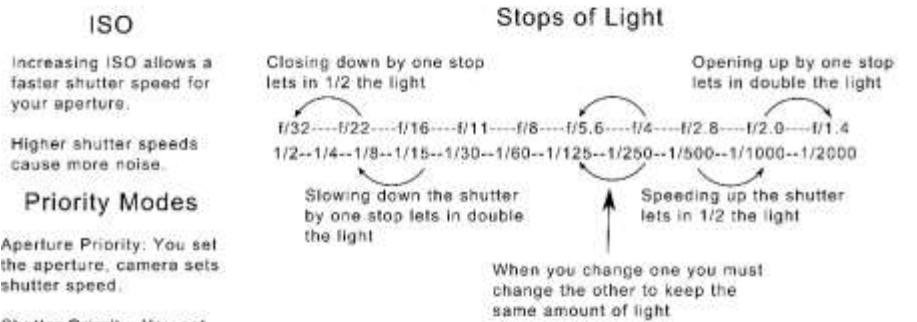
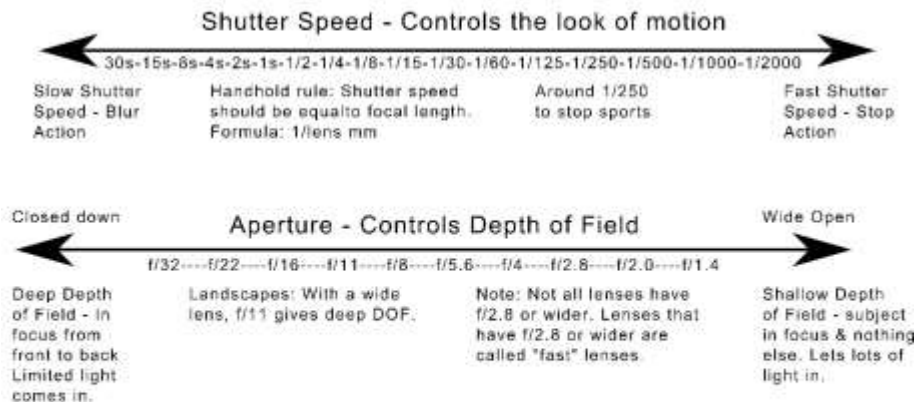


# Reference Guides and Cheat Sheets

## Photography Cheat Sheet by www.bryanhansel.com



Shutter Speed for 600 Rule and 500 Rule www.bryanhansel.com				
Focal Length (mm)	Shutter Speed			
	Full Frame		DX	
	600 rule	500 rule	600 rule	500 rule
10	60	50	40	33
12	50	42	33	28
14	43	36	29	24
15	40	33	27	22
16	38	31	25	21
18	33	28	22	19
20	30	25	20	17
24	25	21	17	14
28	21	18	14	12
30	20	17	13	11
35	17	14	11	10

Note: Round up to nearest shutter speed

**ND Filter Exposure Chart**  
www.bryanhansel.com

Shutter Speed	5-stop ND	6-stop ND	10-stop ND
1/4000	1/125	1/60	1/4
1/2000	1/60	1/30	1/2
1/1000	1/30	1/15	1 sec
1/500	1/15	1/8	2 sec
1/250	1/8	1/4	4 sec
1/125	1/4	1/2	8 sec
1/60	1/2	1 sec	15 sec
1/30	1 sec	2 sec	30 sec
1/15	2 sec	4 sec	1 min
1/8	4 sec	8 sec	2 min
1/4	8 sec	15 sec	4 min
1/2	15 sec	30 sec	8 min
1 sec	30 sec	1 min	15 min
2 sec	1 min	2 min	30 min
4 sec	2 min	4 min	1 hour
8 sec	4 min	8 min	2 hours
15 sec	8 min	15 min	4 hours
30 sec	15 min	30 min	8 hours

ND to Stops Conversion Chart Bryan Hansel   Photography Workshops - www.bryanhansel.com										
Number of Stops	1	2	3	4	5	6	7	8	9	10
ND.number	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3
NDnumber	ND2	ND4	ND8	ND16	ND32	ND64	ND128	ND256	ND512	ND1000