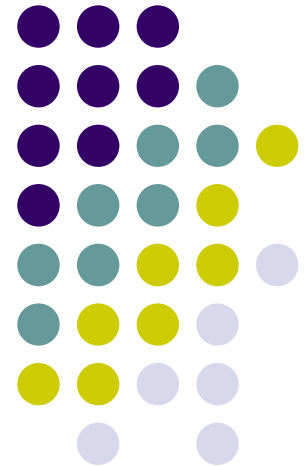


Military Applications for Rare Earth Technologies

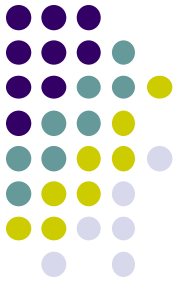
Rare Earth elements are uniquely indispensable in many electronic, optical and magnetic applications for the US Military. Following is a *partial* listing of critical Rare Earth defense applications. *None of these defense systems can be sustained without reliable Rare Earth technology supply chains.*

“Now armed with its monopoly, China is jacking up prices by cutting production and exports and pressuring high-tech manufacturers to set up shop in China, where supplies are more plentiful. The combination of rising costs and tighter control on exports, however, is alarming companies worldwide, including U.S. weapons makers and Pentagon officials.”

Defense News September 2009 edition,



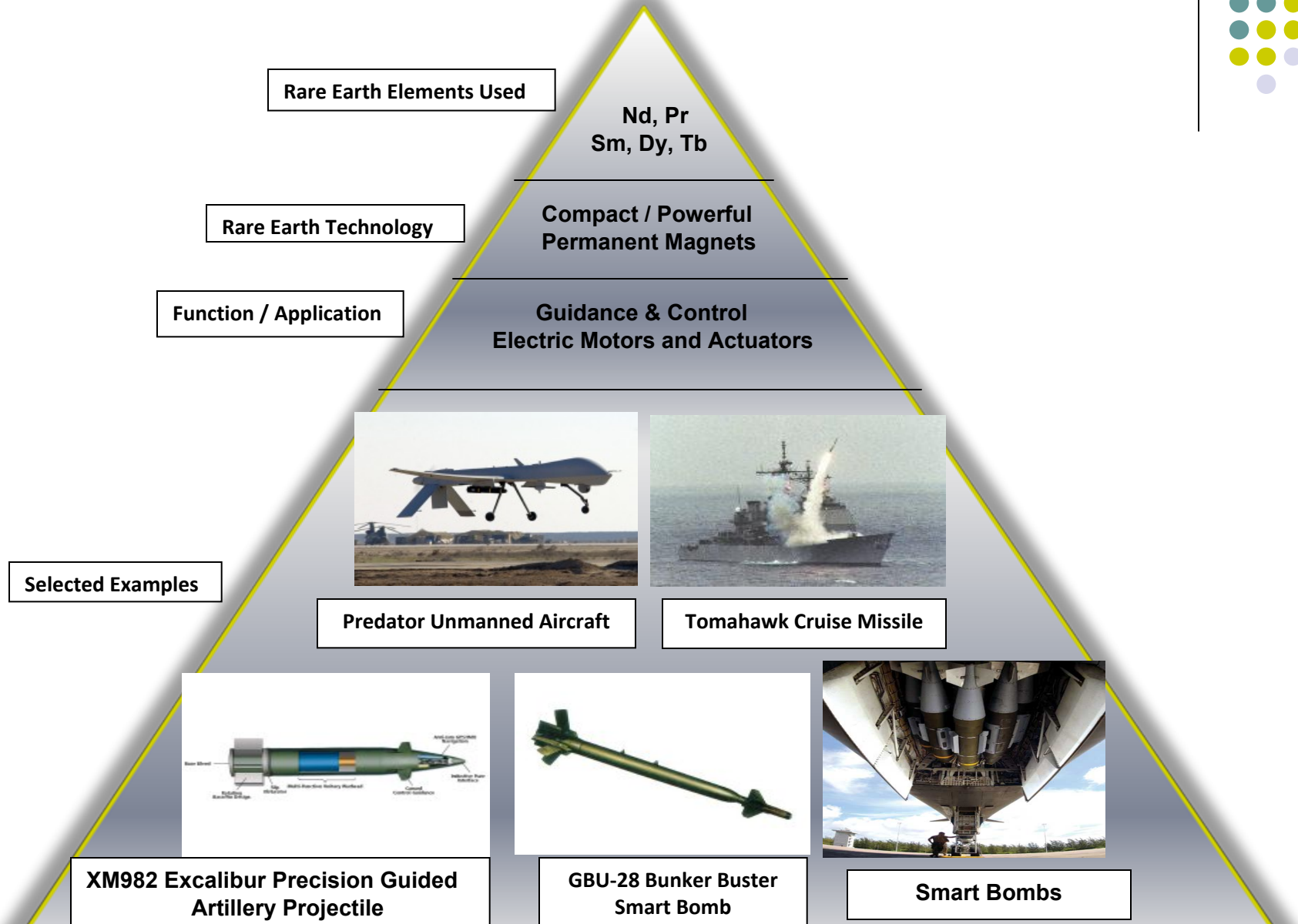
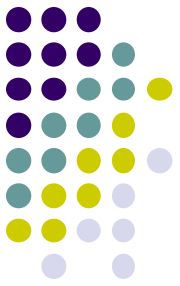
What are the Rare Earth Elements?



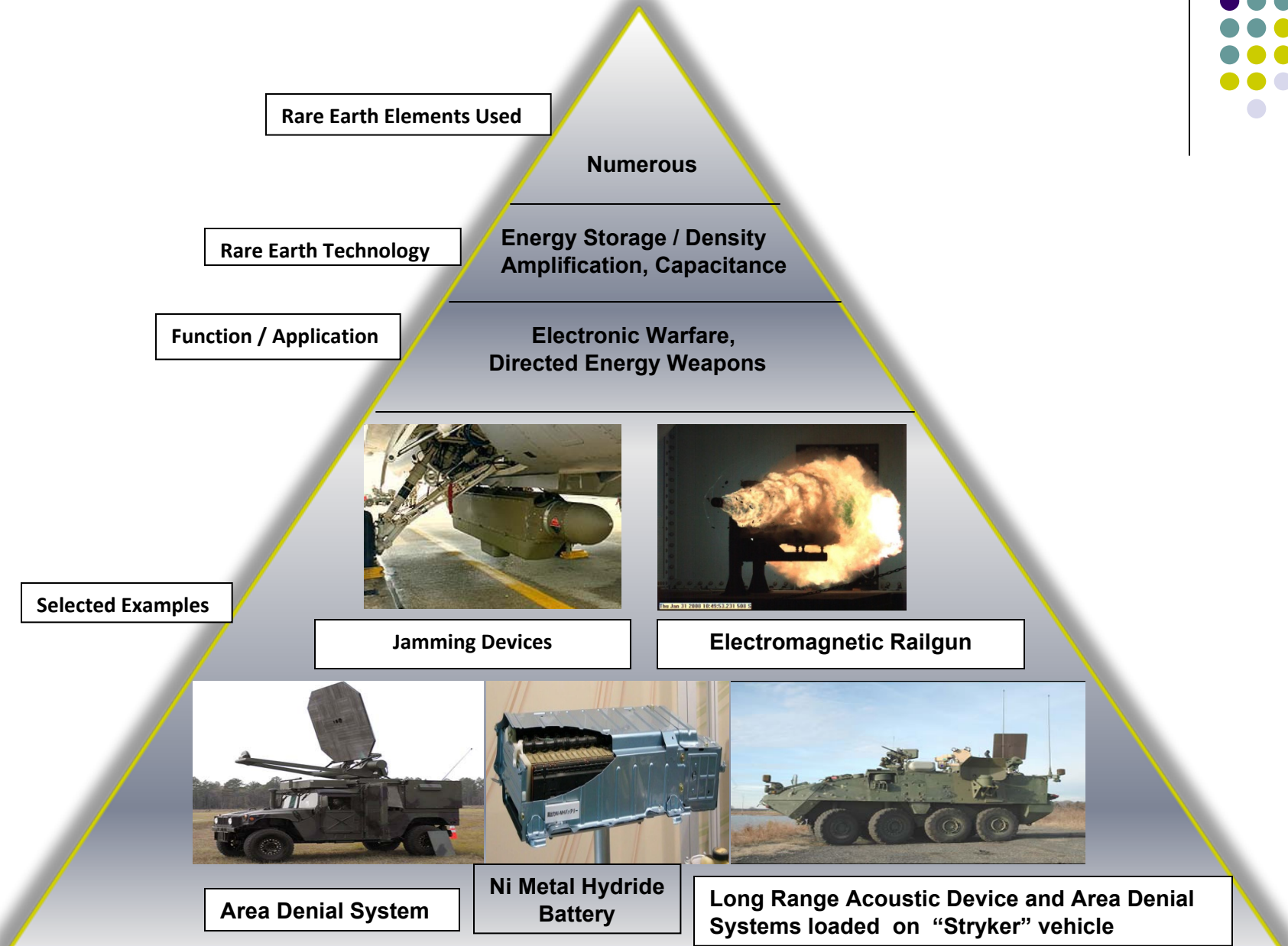
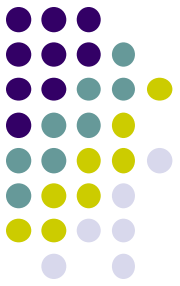
H																	He
Li	Be											B	C	N	O	F	Ne
Na	Mg											Al	Si	P	S	Cl	Ar
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
Cs	Ba		Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
Fr	Ra		Rf	Db	Sg	Bh	Hs	Mt									
		La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	*
		Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr	

* Rare Earths include the lanthanide series of elements and Yttrium (Y)

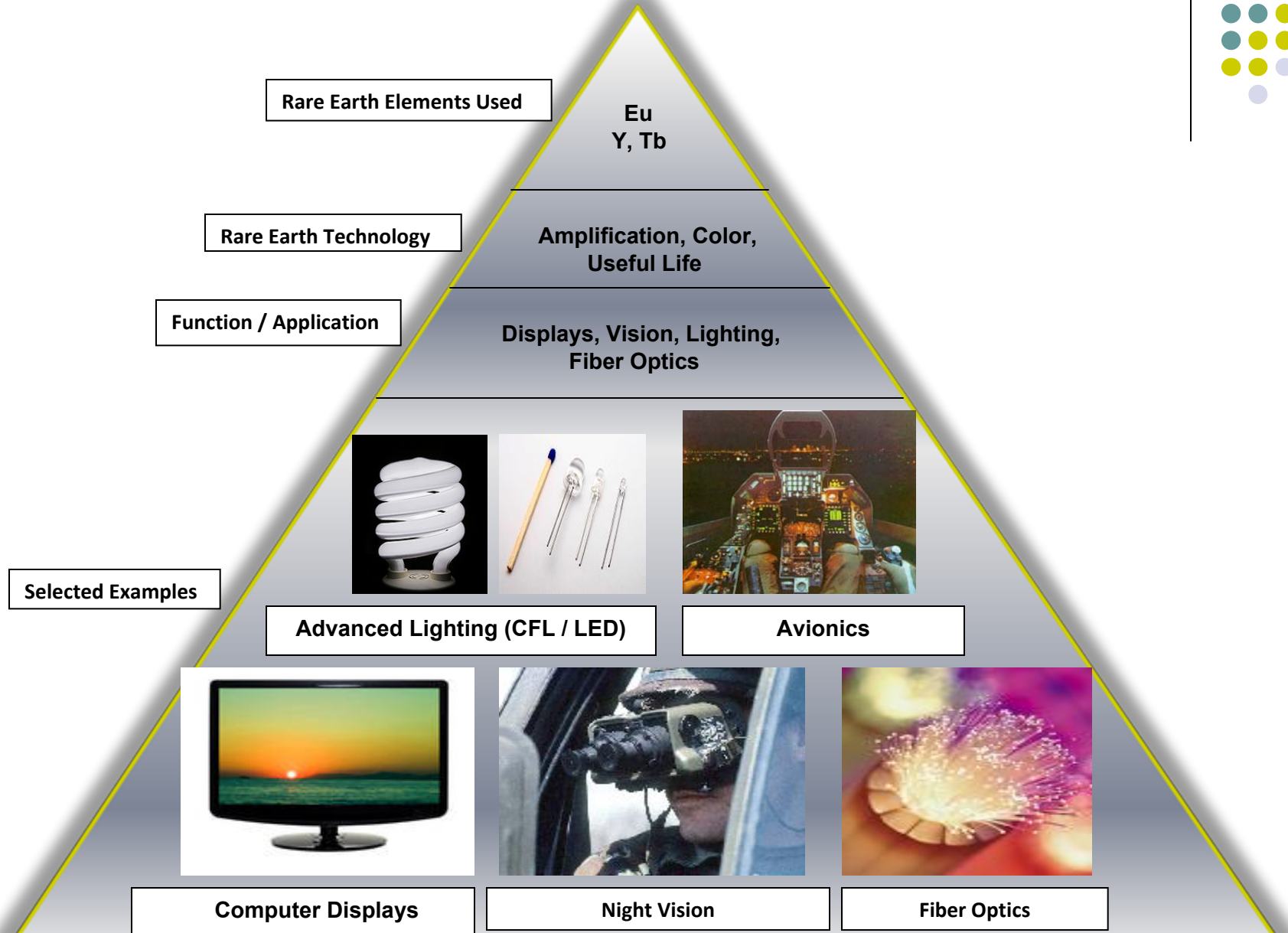
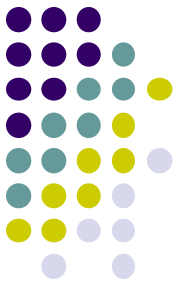
Rare Earth Technology Applied to Guidance & Control



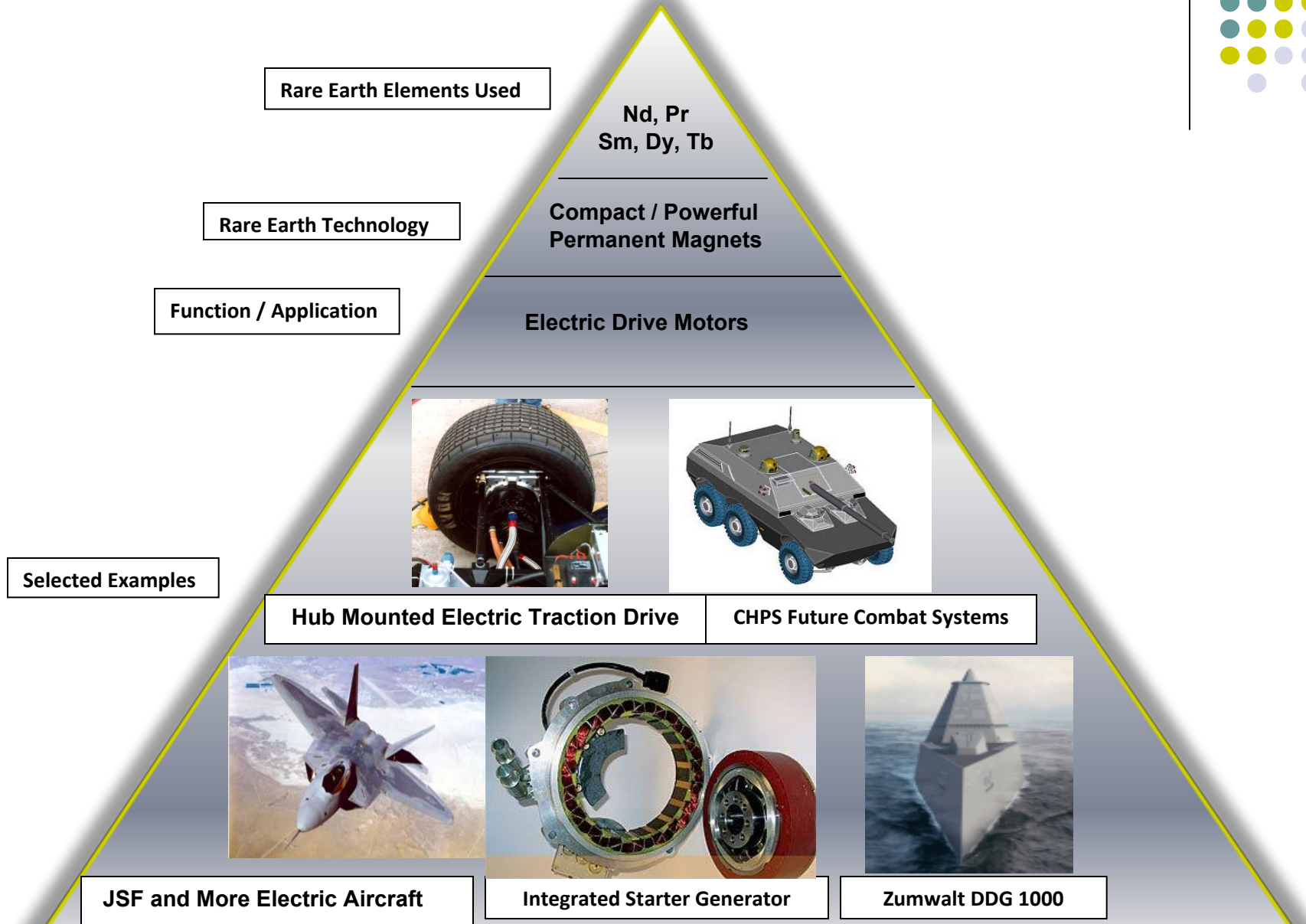
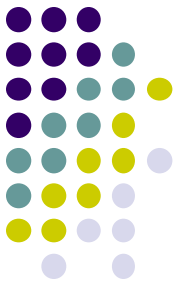
Rare Earth Technology Applied to Electronics



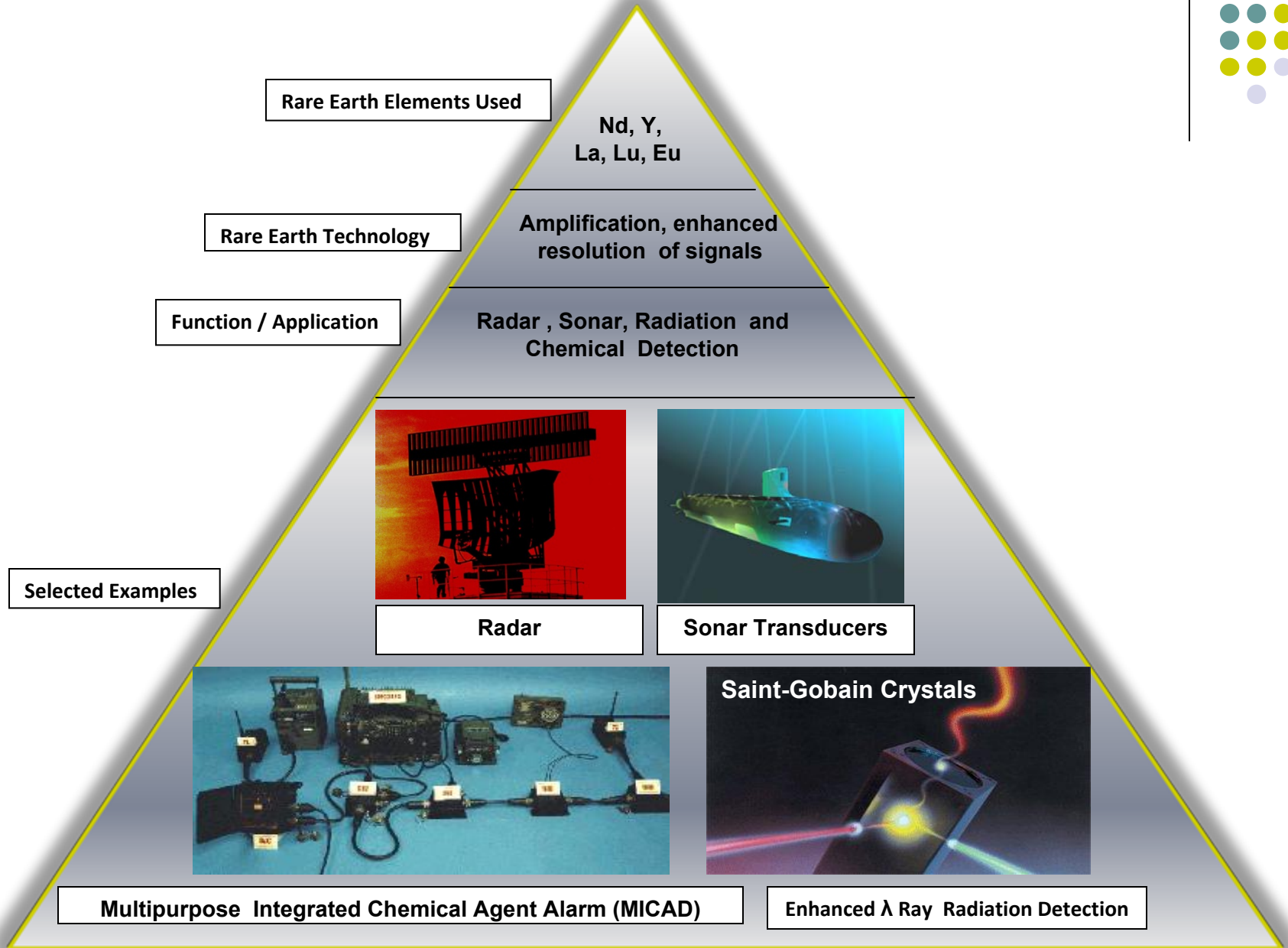
Rare Earth Technology Applied to Optics



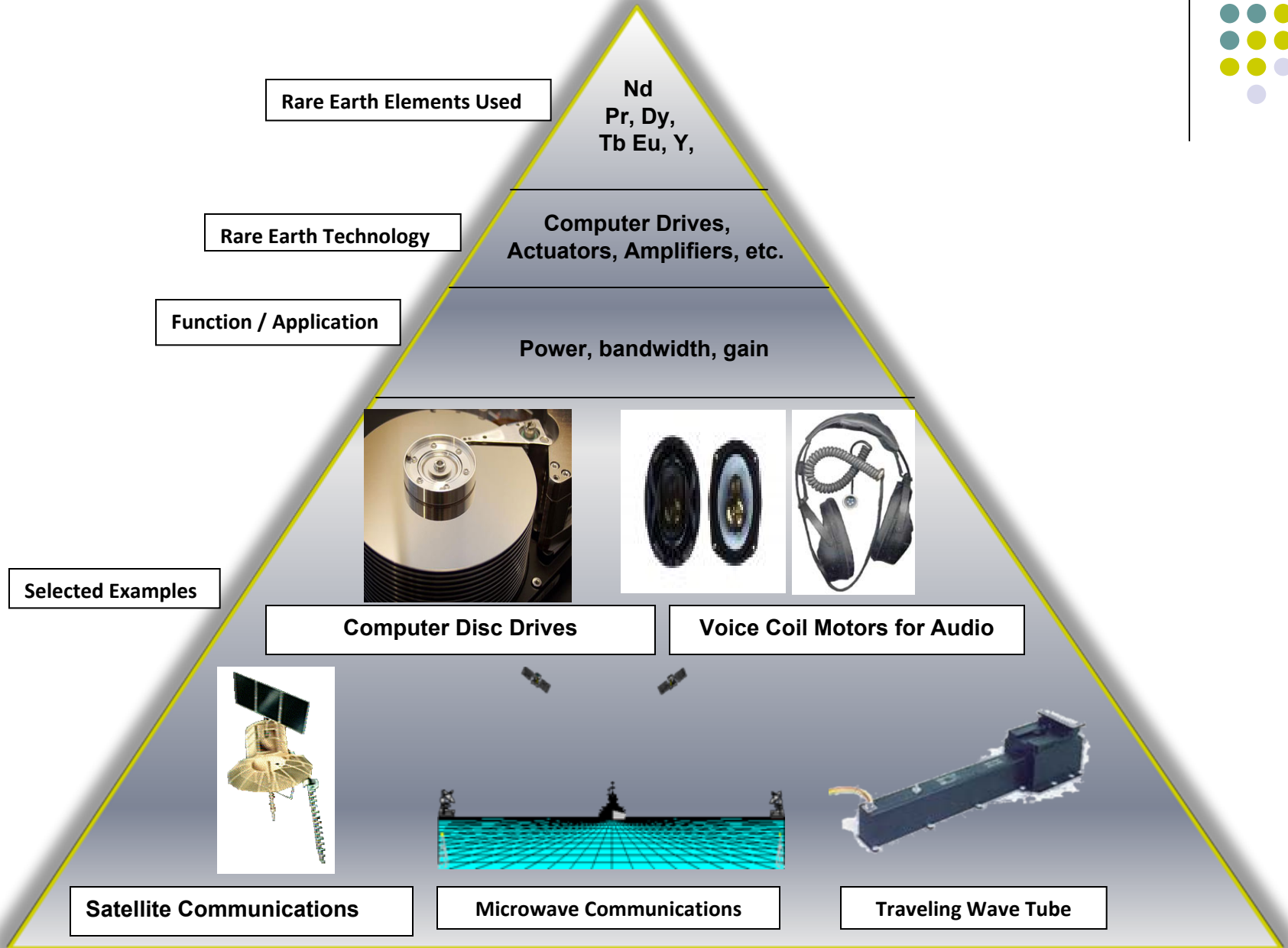
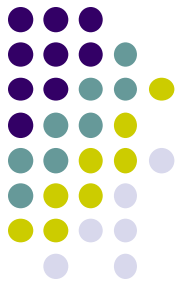
Rare Earth Technology Applied to Power, Stealth, Fuel Efficiency



Rare Earth Technology Applied to Surveillance & Detection



Rare Earth Technology Applied to Communications



Rare Earth Technology Applied to Lasers

