

# Interactions of Nature

**weak force**

**strong force**

**electromagnetism**

**gravity**

# MATTER

Periodic Table  
of the Elements

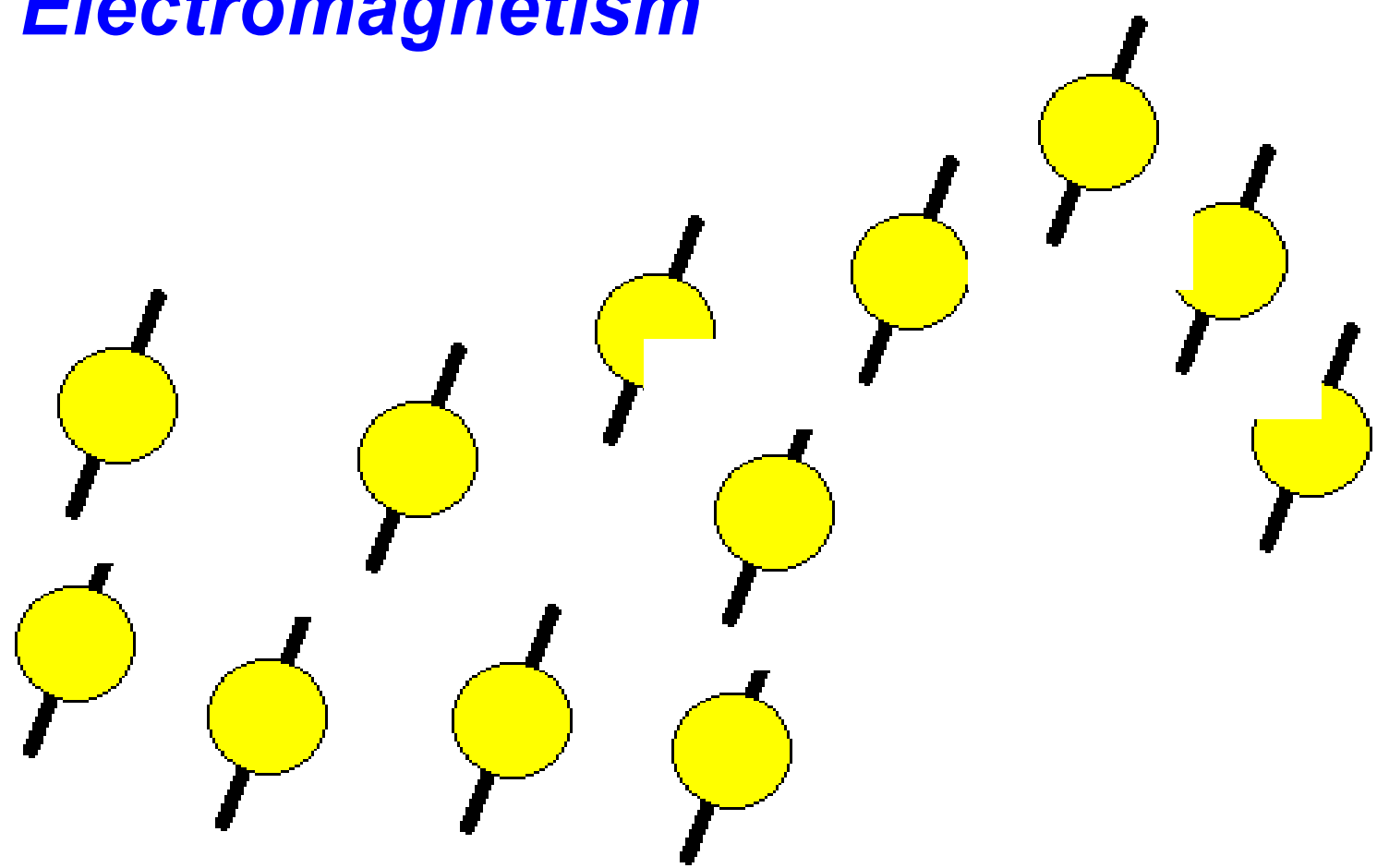
1	IA	1	H	2	0	2	He										
3	IIA	3	Li	4	5	6	7	8	9	10							
11	12	13	Na	Mg	III A	14	15	16	17	18							
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
55	56	57	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86
87	88	89	104	105	106	107	108	109	110	111	112	81	82	83	84	85	86

Naming conventions of new elements

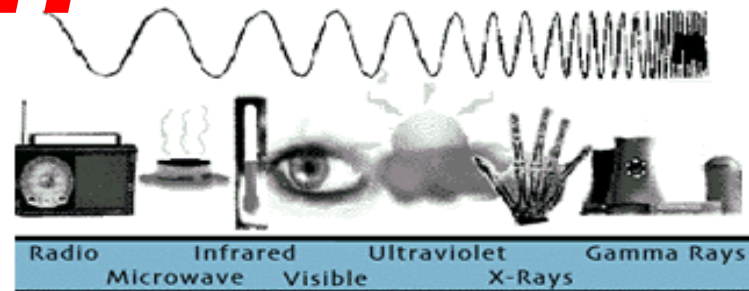
* Lanthanide Series	58	59	60	61	62	63	64	65	66	67	68	69	70	71
	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu
+ Actinide Series	90	91	92	93	94	95	96	97	98	99	100	101	102	103
	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr

## Weak and Strong

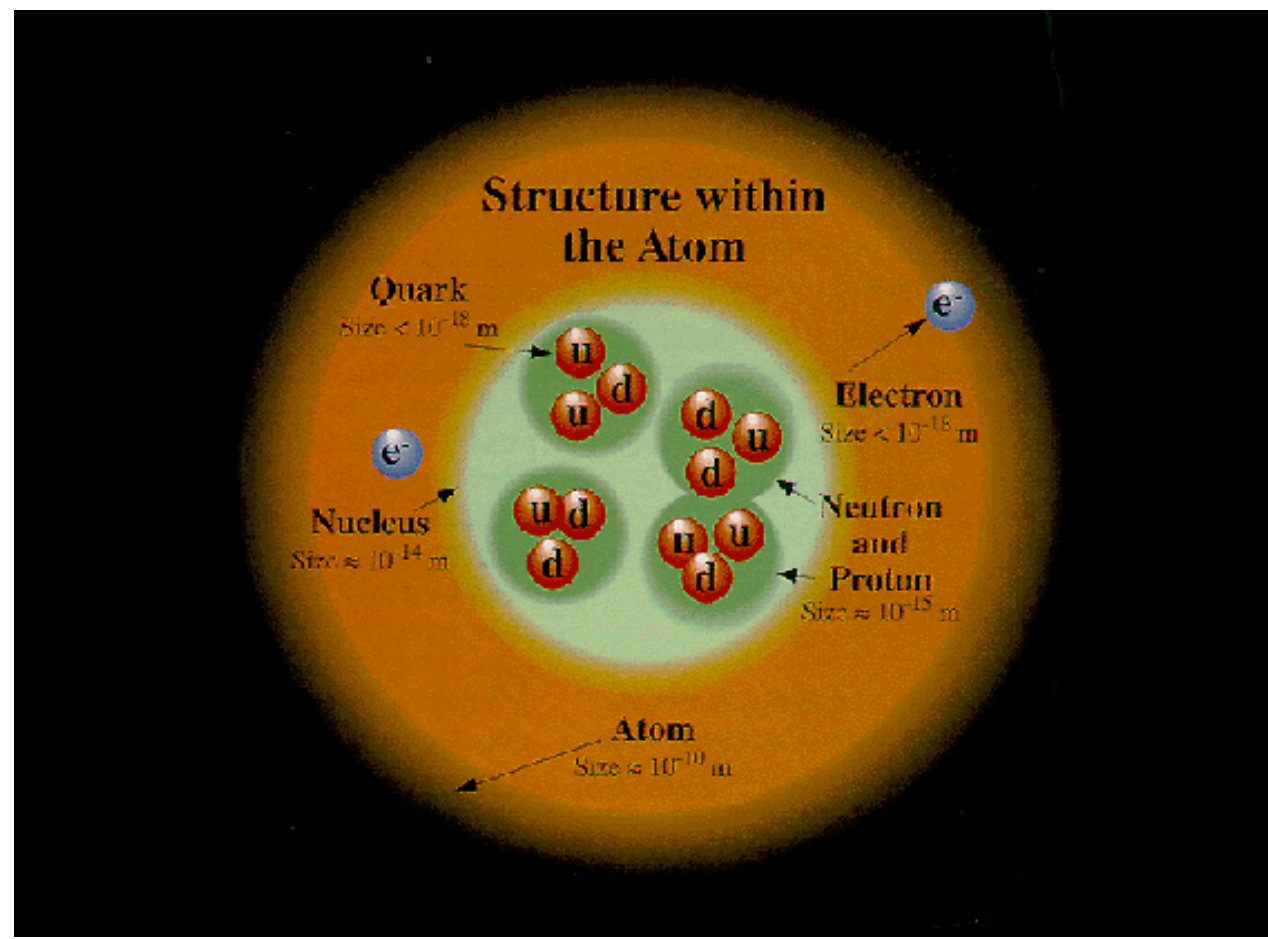
# *Electromagnetism*



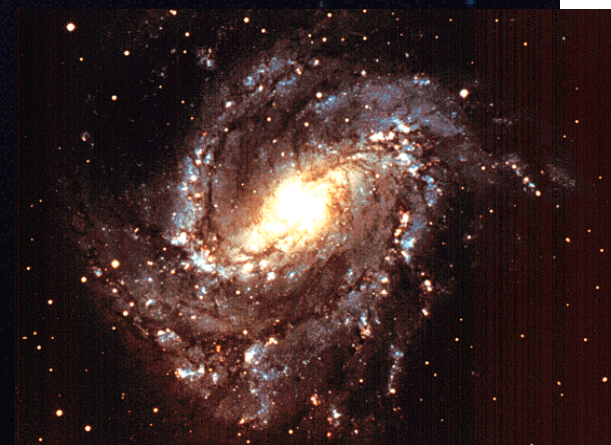
# *Electromagnetic wave spectrum*



The electromagnetic spectrum stretches from radio waves to gamma rays.



# Gravity and Motion





# Newton's

## First Law

An object that is in motion continues in a straight line, at constant speed, unless a force acts upon it.

## Second Law

If an unbalanced force acts upon an object, the object will be accelerated ( $F = ma$ ).

## Third Law

For every action there is a opposite and equal reaction .

# Basketball







# Micro- gravity

# Anti-gravity machines

