

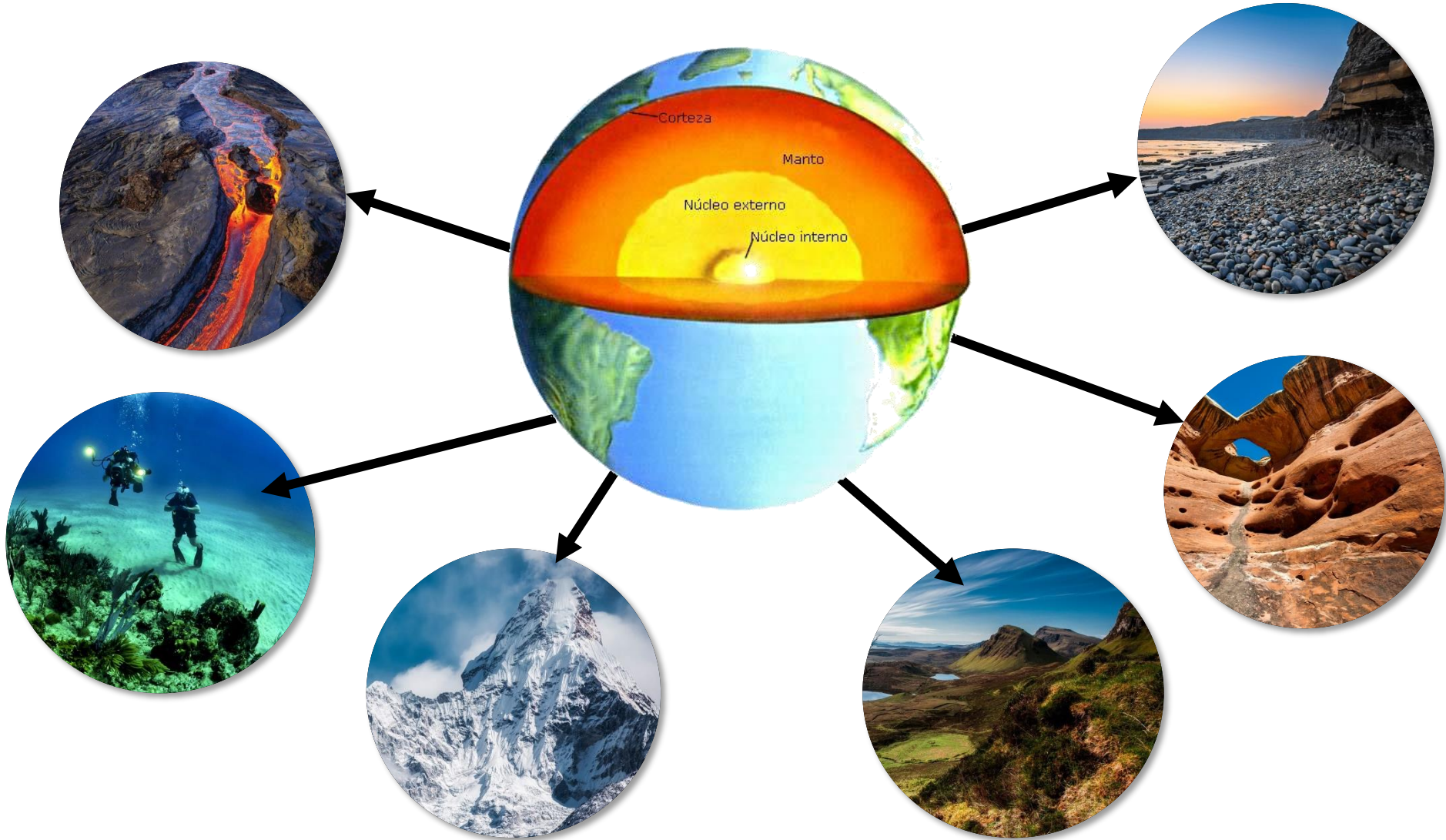
INTRODUCCIÓN A LA GEOLOGÍA

Ciclo de las Rocas

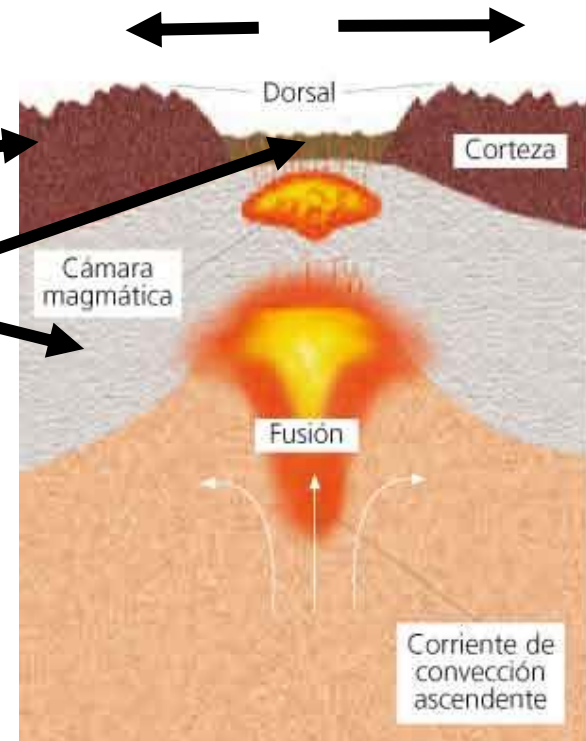
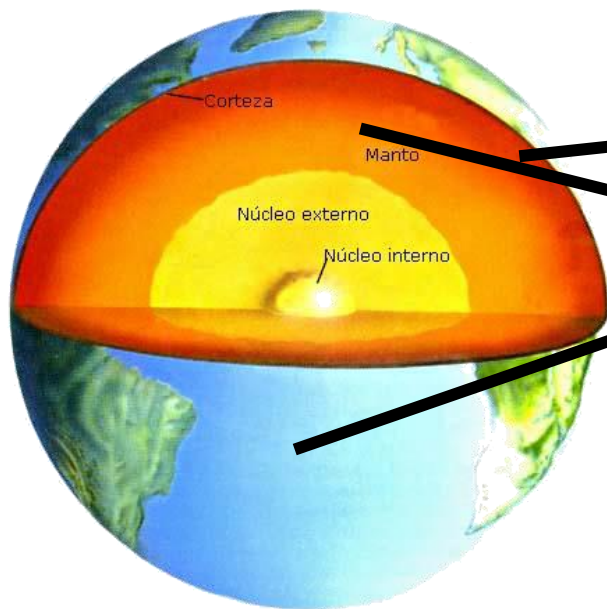


CATEDRA DE GEOLOGIA
Facultad de Ingeniería
Universidad Nacional de Jujuy

Ciclo de las rocas



Ciclo de las rocas



Ciclo de las rocas

ELEMENTOS

1	H																	2	He
2	3	4											5	6	7	8	9	10	
	Li	Be											B	C	N	O	F	Ne	
3	11	12											13	14	15	16	17	18	
	Na	Mg											Al	Si	P	S	Cl	Ar	
4	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	
	K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr	
5	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	
	Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe	
6	55	56		72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	
	Cs	Ba		Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn	
7	87	88		104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	
	Ra		Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg	Cn	Nh	Fl	Ms	Lv	Ts	Og		
Lanthanides		57	58	59	60	61	62	63	64	65	66	67	68	69	70	71			
		La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu			
Actinides		89	90	91	92	93	94	95	96	97	98	99	100	101	102	103			
		Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr			

ROCAS

Limestone



Sandatlas.org

Sandstone



Basalt



Sandatlas.org

© 2013 Imperial College London

Granite



© 2013 Imperial College London

Slate



Sandatlas.org

Gneiss



Flickr/James St John



Halite (salt)



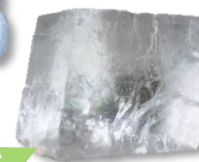
Pyrite



Feldspar © Barry Marsh SOES



Quartz



Calcite

MINERALES



Composición de una roca



Sandatlas.org

Feldespato

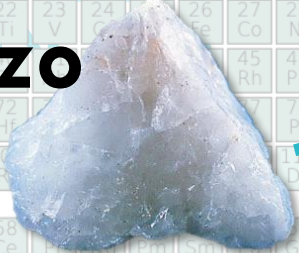
(Image © Barry A. Scheraga)



SOES)

2	3	4																	
	Li	Be																	
3	11	12																	
	Na	Mg																	
4	19	20	21	22	23	24	25	26	27	28	29	30							
	K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn							
6	55	56	72											78	79				
	Cs	Ba	Hf											Pt	Ag				
7	87	88	104											110	111				
	Fr	Ra	Rf											Ds	Rg				
Lanthanides		57	58	59	60	61	62	63	64	65									
		La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb									
Actinides		89	90	91	92	93	94	95	96	97									
		Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk									

Cuarzo



Mica (Biotita)

Halite (salt)

Quartz



Calcite

MINERAL



© 2013 Imperial College London

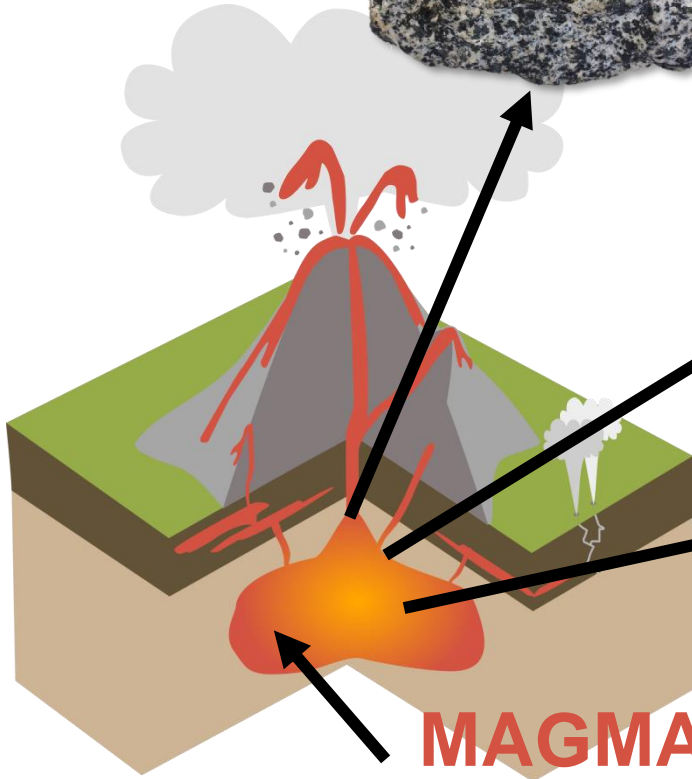
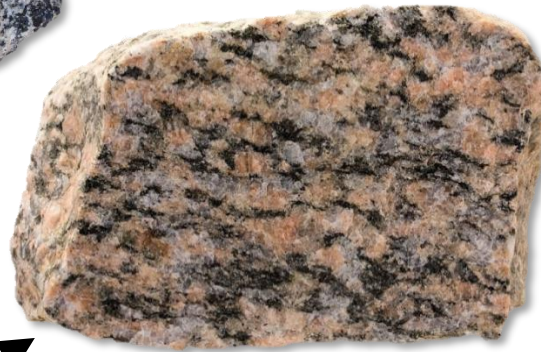
Flickr/James St John

Gneiss



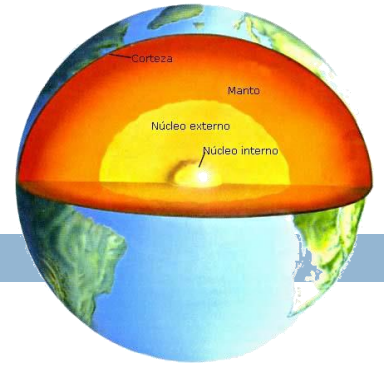
Flickr/James St John

ROCAS IGNEAS INTRUSIVAS



MAGMA

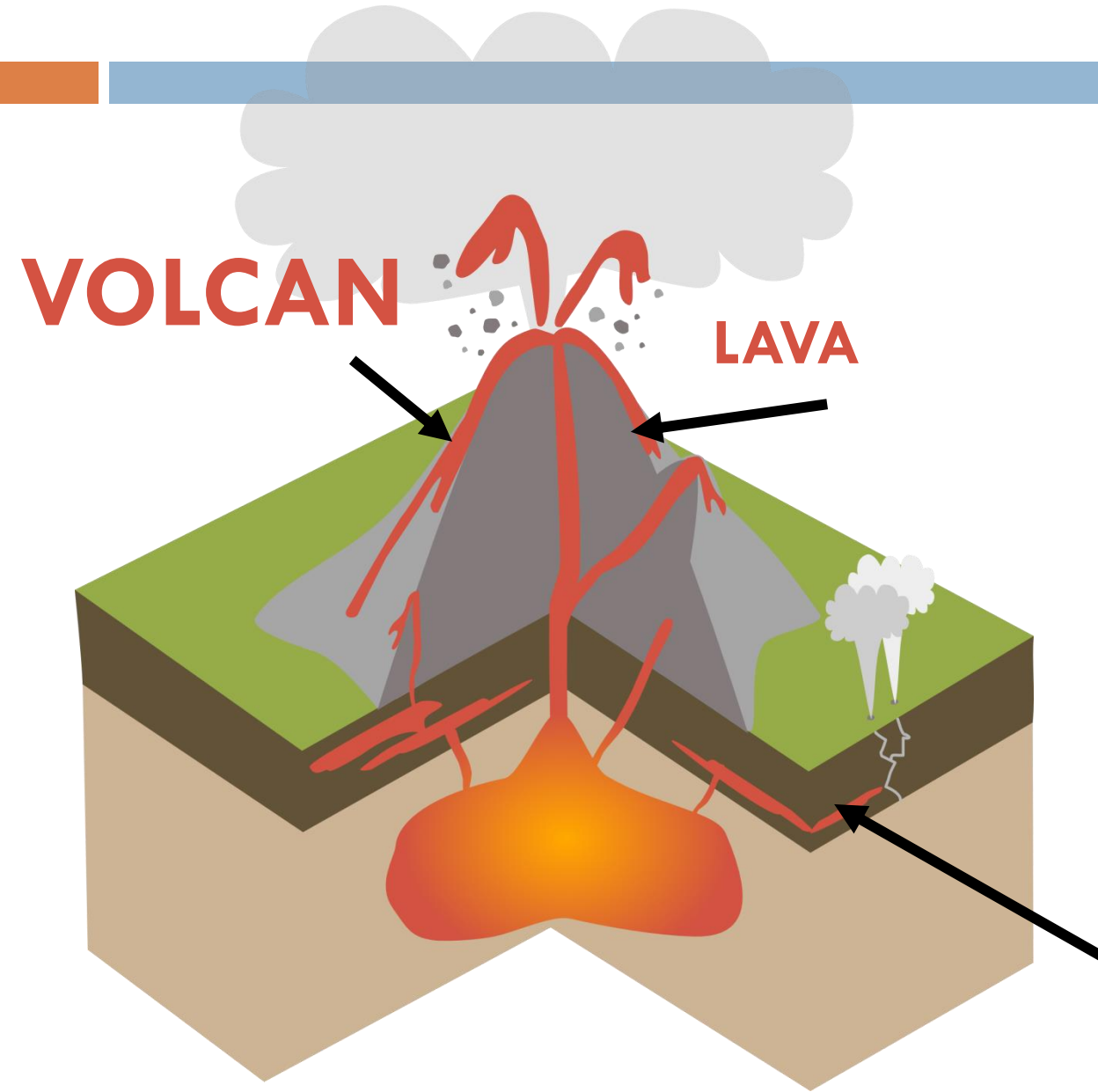
Ciclo de las rocas: ROCAS IGNEAS



ROCAS ÍGNEAS

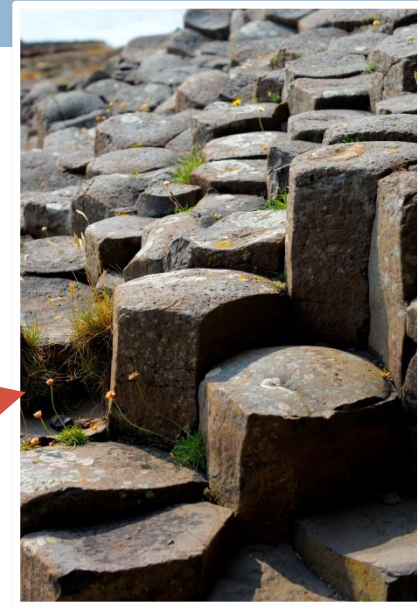
Rocas extrusivas:
rocas formadas a partir de
lava

Rocas intrusivas:
rocas formadas a partir del
magma.

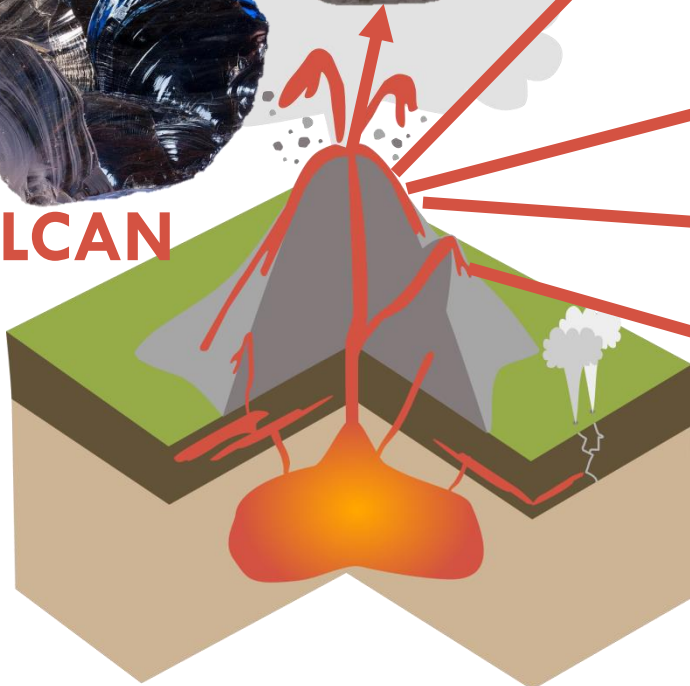


MAGMA

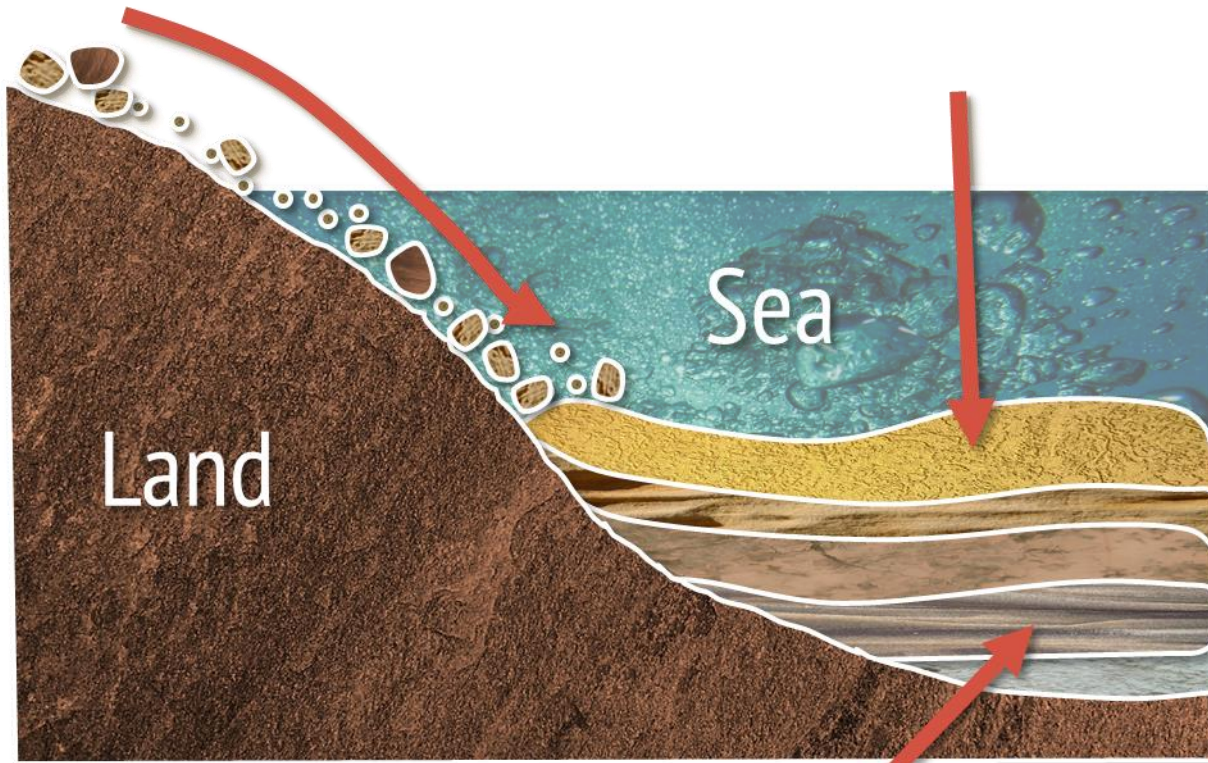
ROCAS IGNEAS VOLCANICAS



VOLCAN



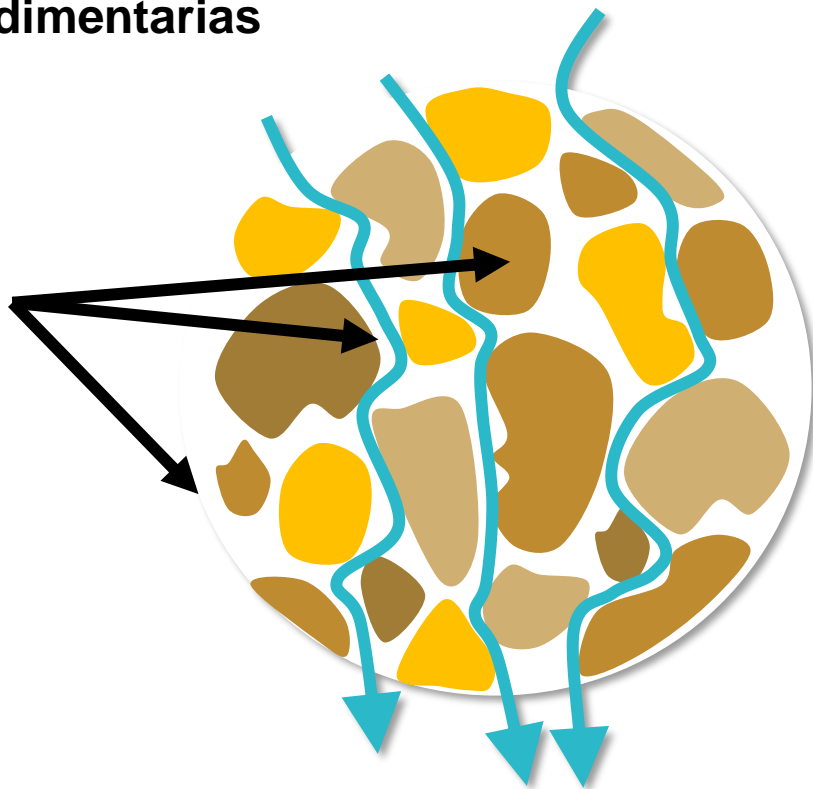
ROCAS SEDIMENTARIAS



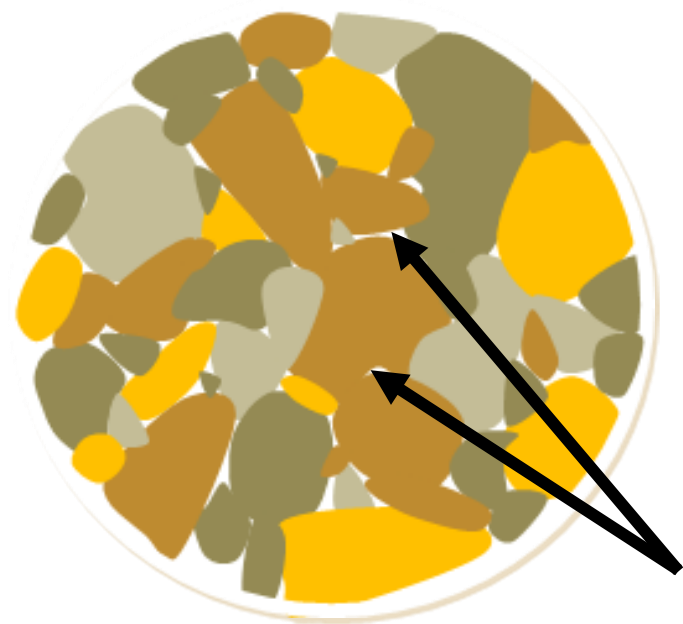
El sedimento se compacta y cementa y forma las rocas sedimentarias

ROCAS SEDIMENTARIAS

Porosidad de las rocas sedimentarias

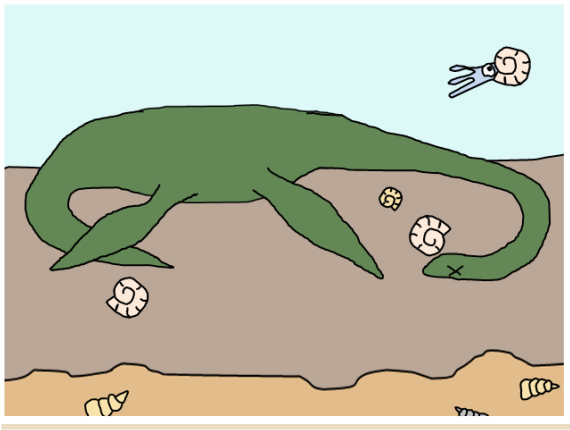


PERMEABLE

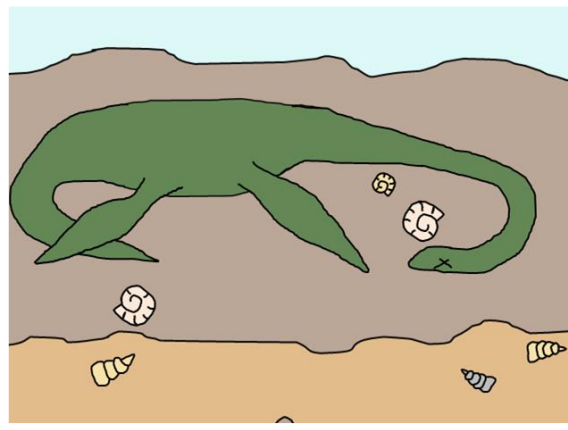


ROCAS SEDIMENTARIAS

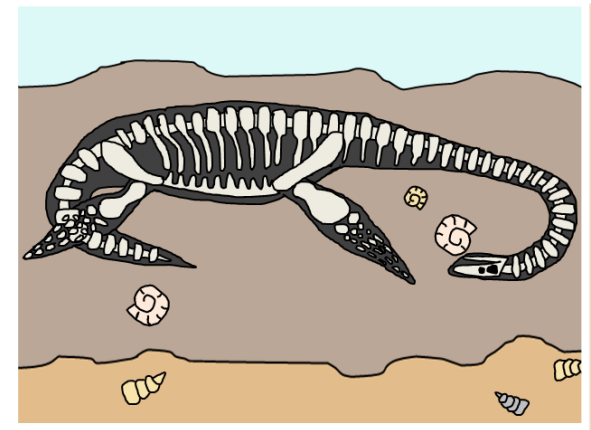
1. Muerte



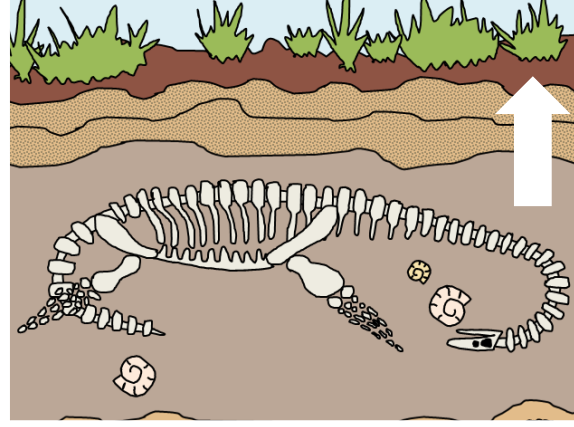
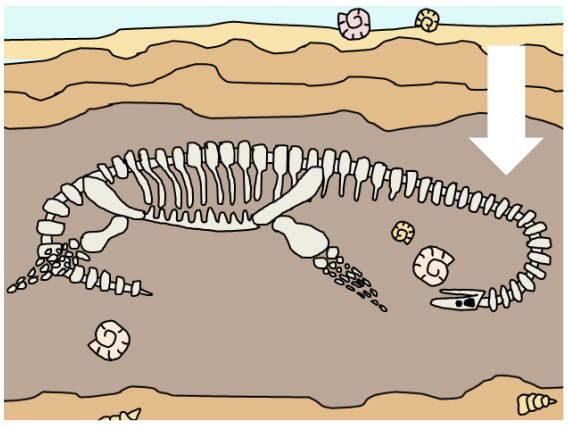
2. Enterramiento



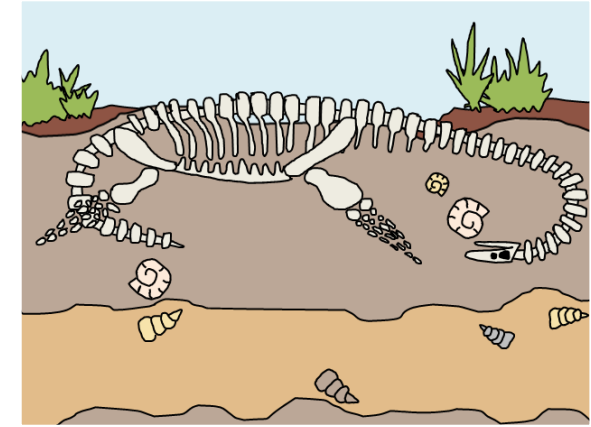
3. Descomposición



4. Sedimentación y fosilización



5. Erosión y exposición

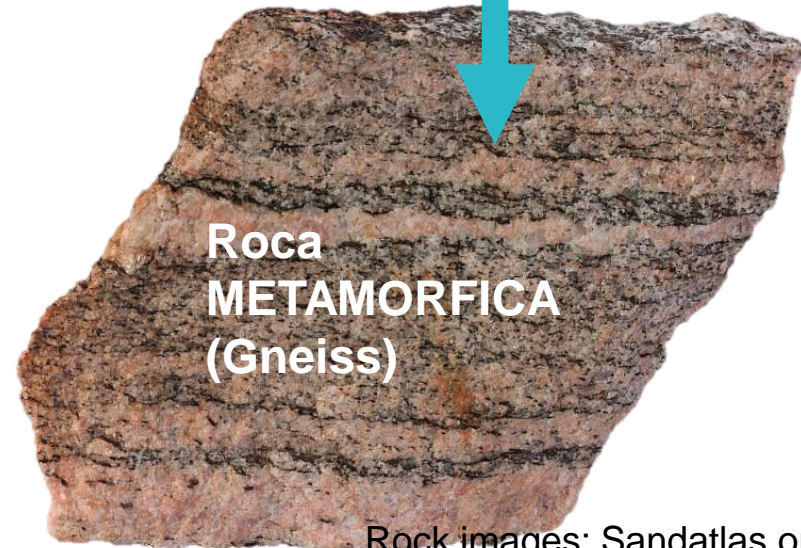


ROCAS METAMORFICAS

Cambio de presión y Temperatura



Roca
IGNEA
Granito



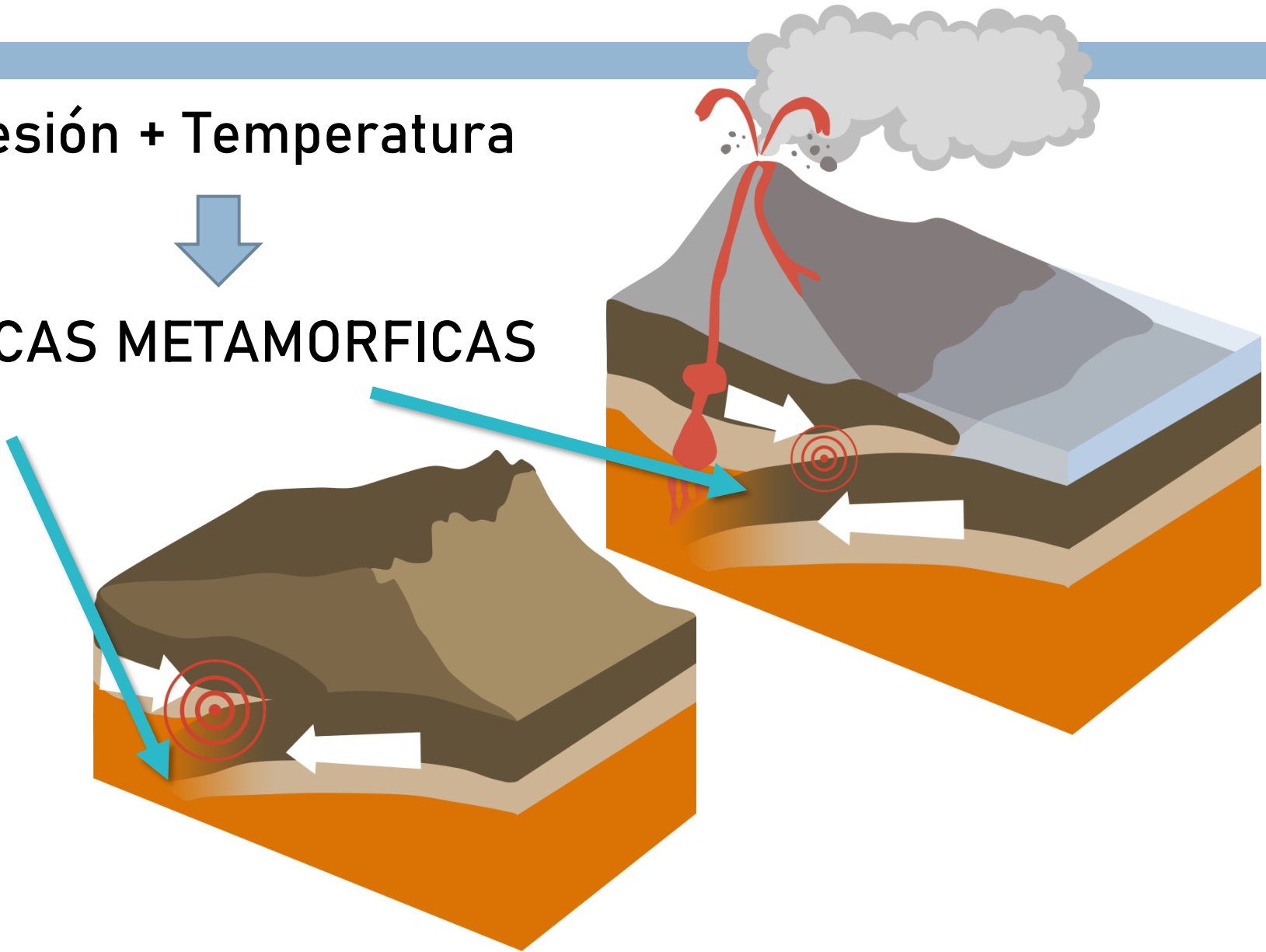
Roca
METAMORFICA
(Gneiss)

ROCAS METAMORFICAS

Presión + Temperatura



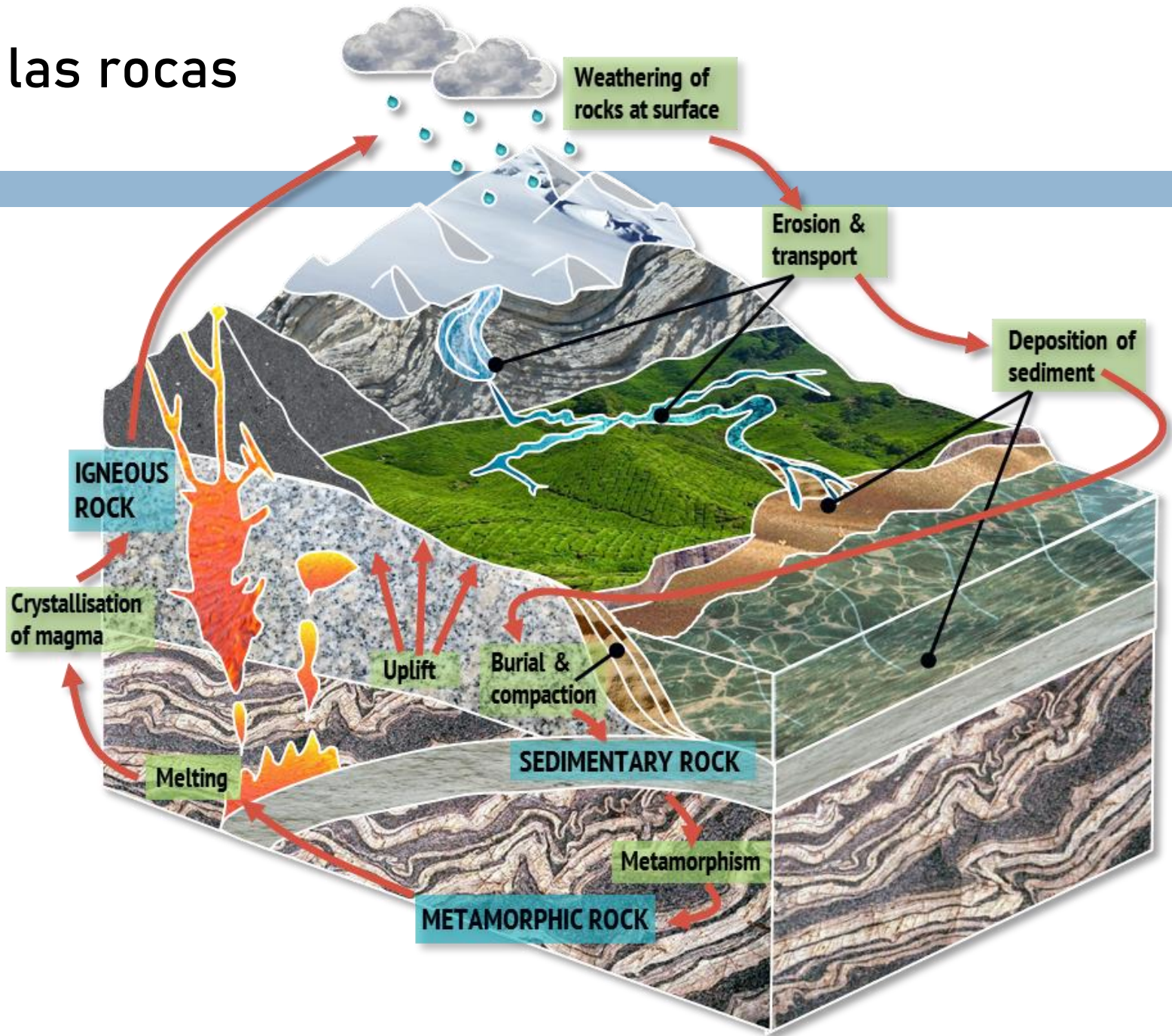
ROCAS METAMORFICAS



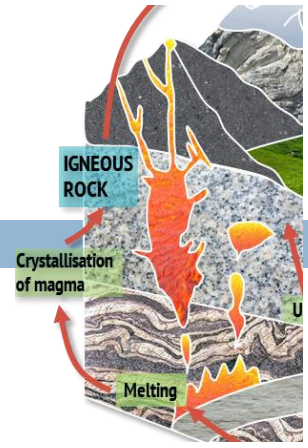
ROCAS METAMORFICAS



Ciclo de las rocas



Ciclo de las rocas



Próxima clase: Diferenciación Magmática

