Tema 8.
Xeomorfoloxía litolóxica

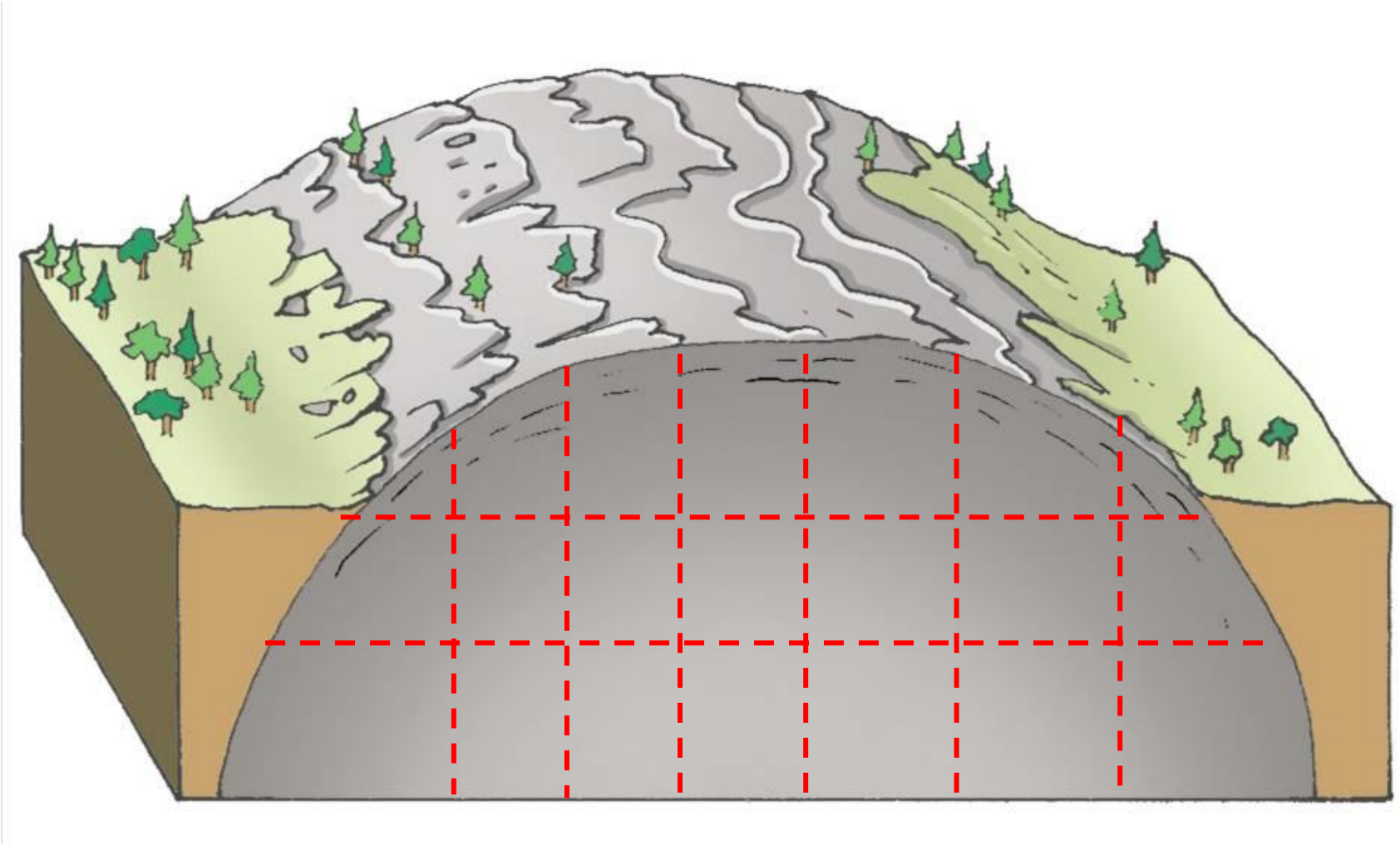
TIPO DE ROCHA

GRANÍTICA E CÁRSTICA

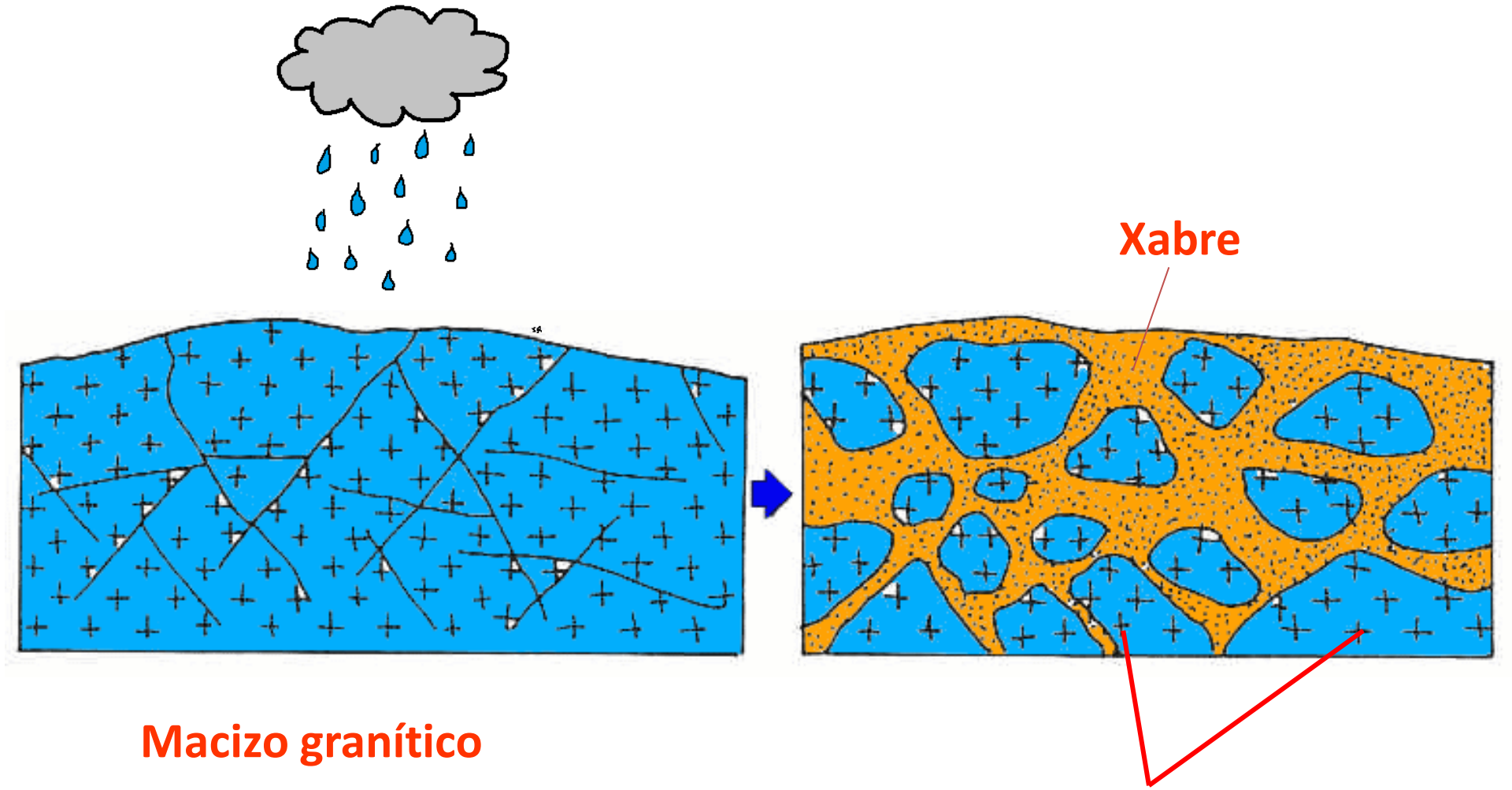
XEOMORFOLOXÍA GRANÍTICA


MARTIN

INTENSA FRACTURACIÓN



A AUGA CIRCULA POLAS FENDAS DA ROCHA PRODUCINDO HIDRÓLESE



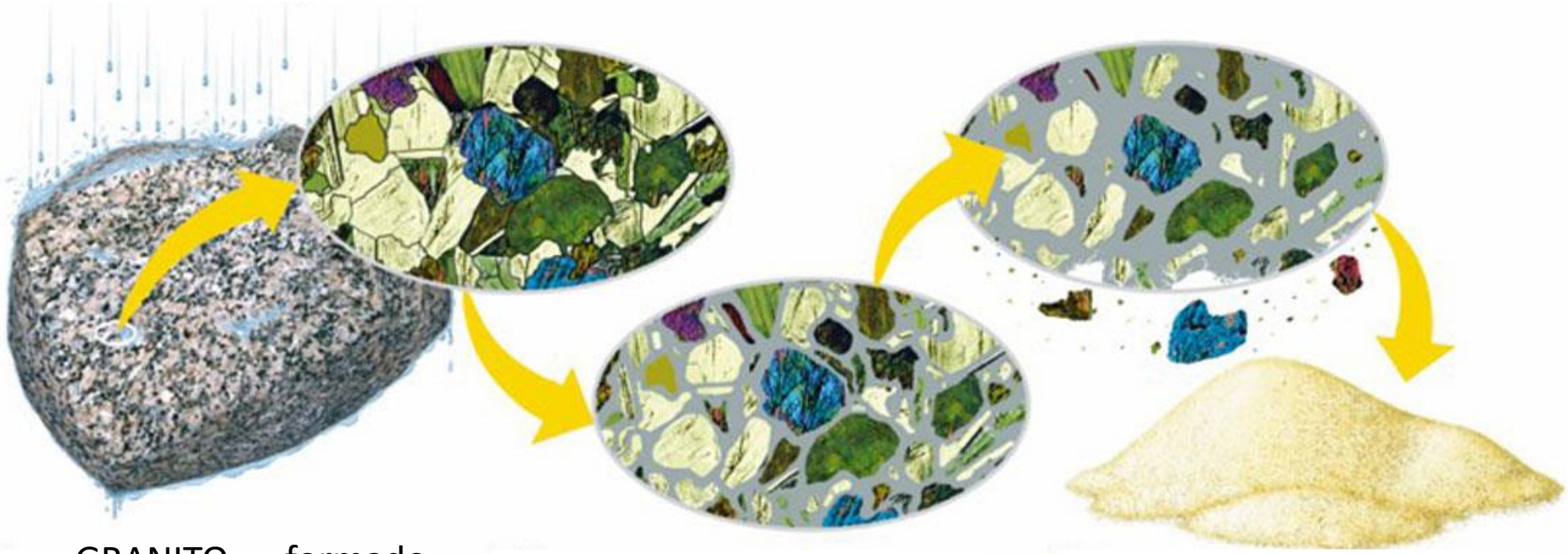
METEORIZACIÓN POR HIDRÓLESE

ORTOSA + H_2O ⟶ MINERAIS ARXILOSOS

MINERAL CONSISTENTE

MINERAL NON CONSISTENTE

METEORIZACIÓN DO GRANITO POR HIDRÓLESE



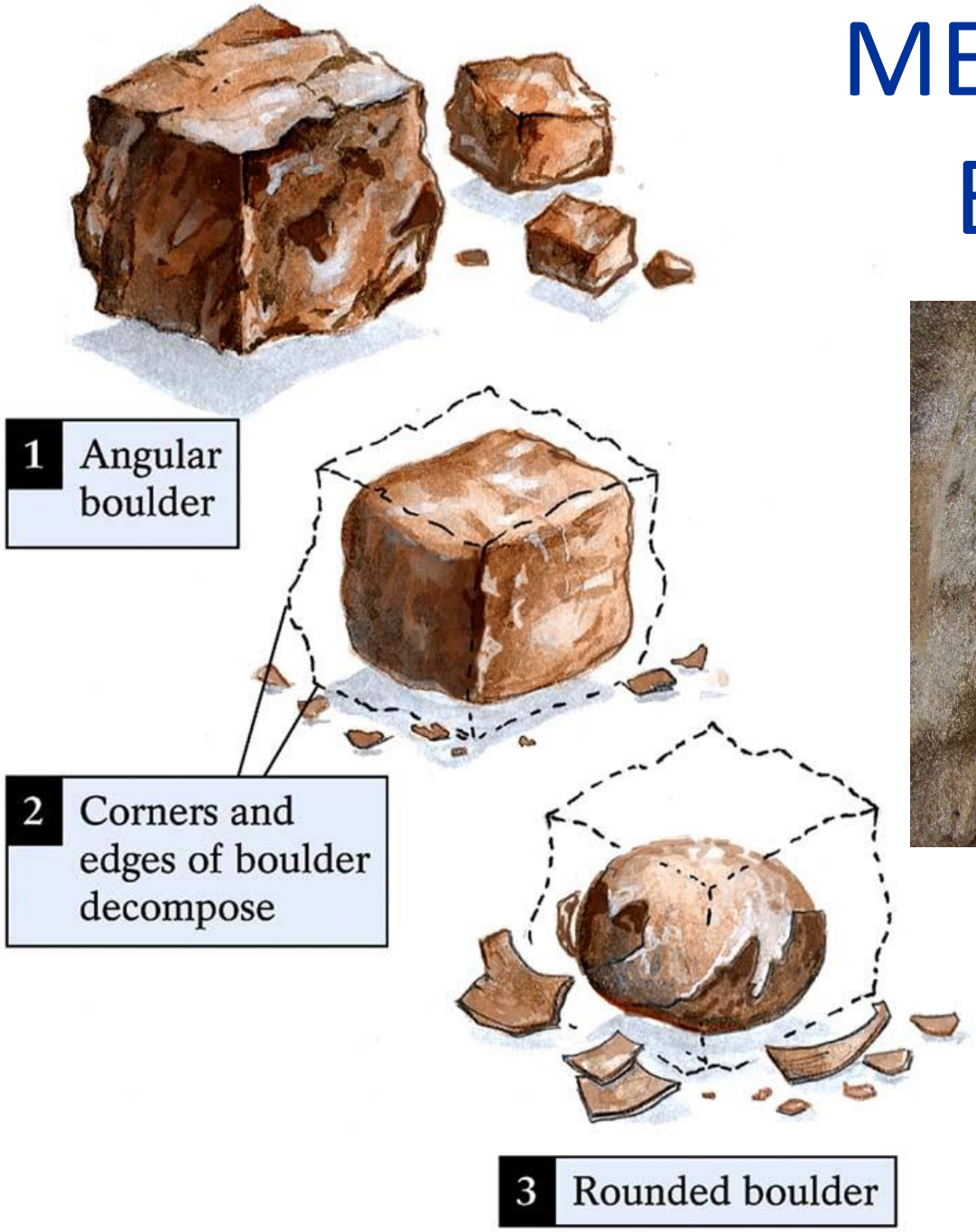
GRANITO formado principalmente por cuarzo e feldespatos

Por hidrólese os feldespatos se transforman en arxilas

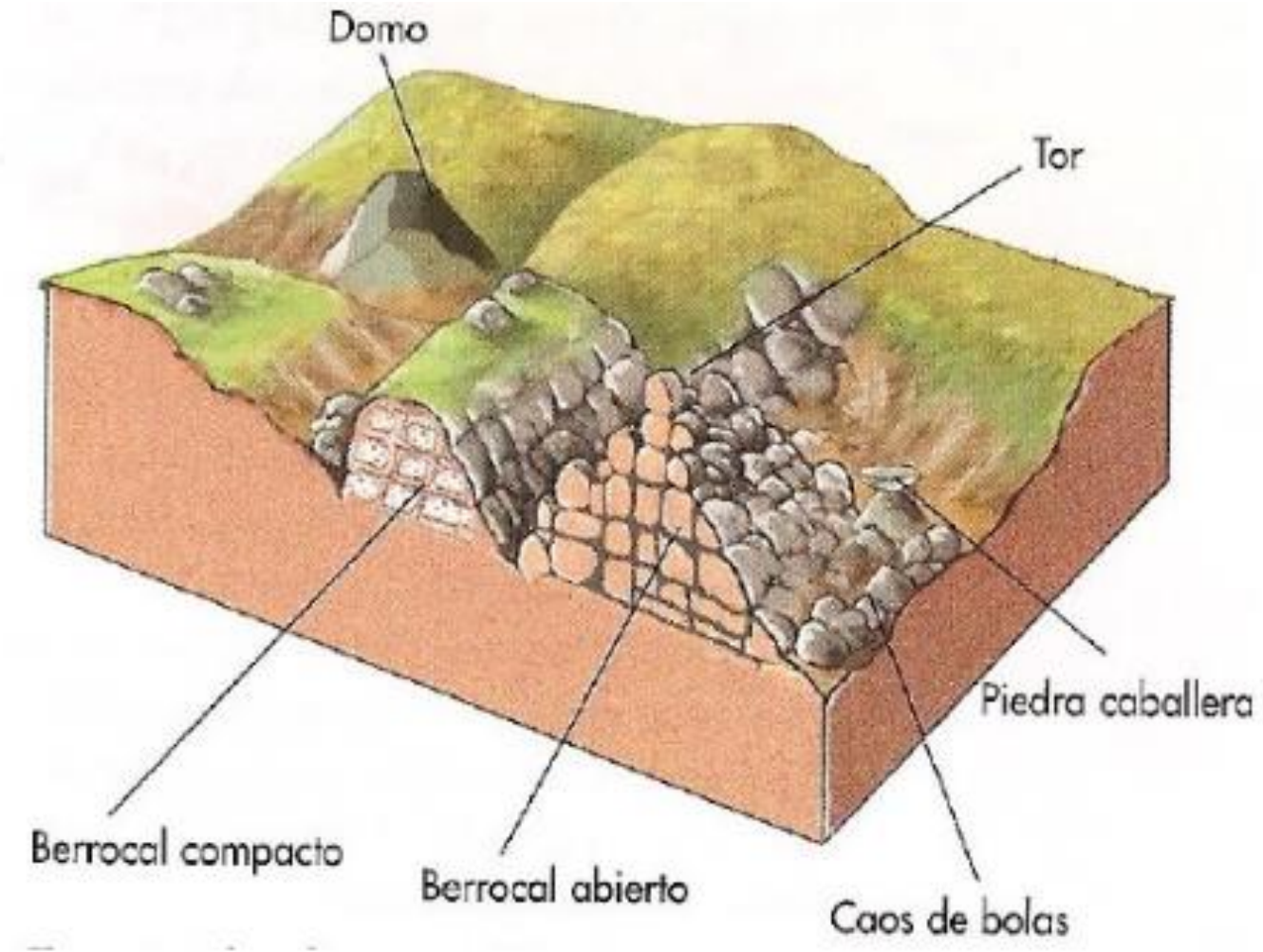
XABRE: area con grans de cuarzo nunha matriz arxilosa

SAPROLITA (XABRE)

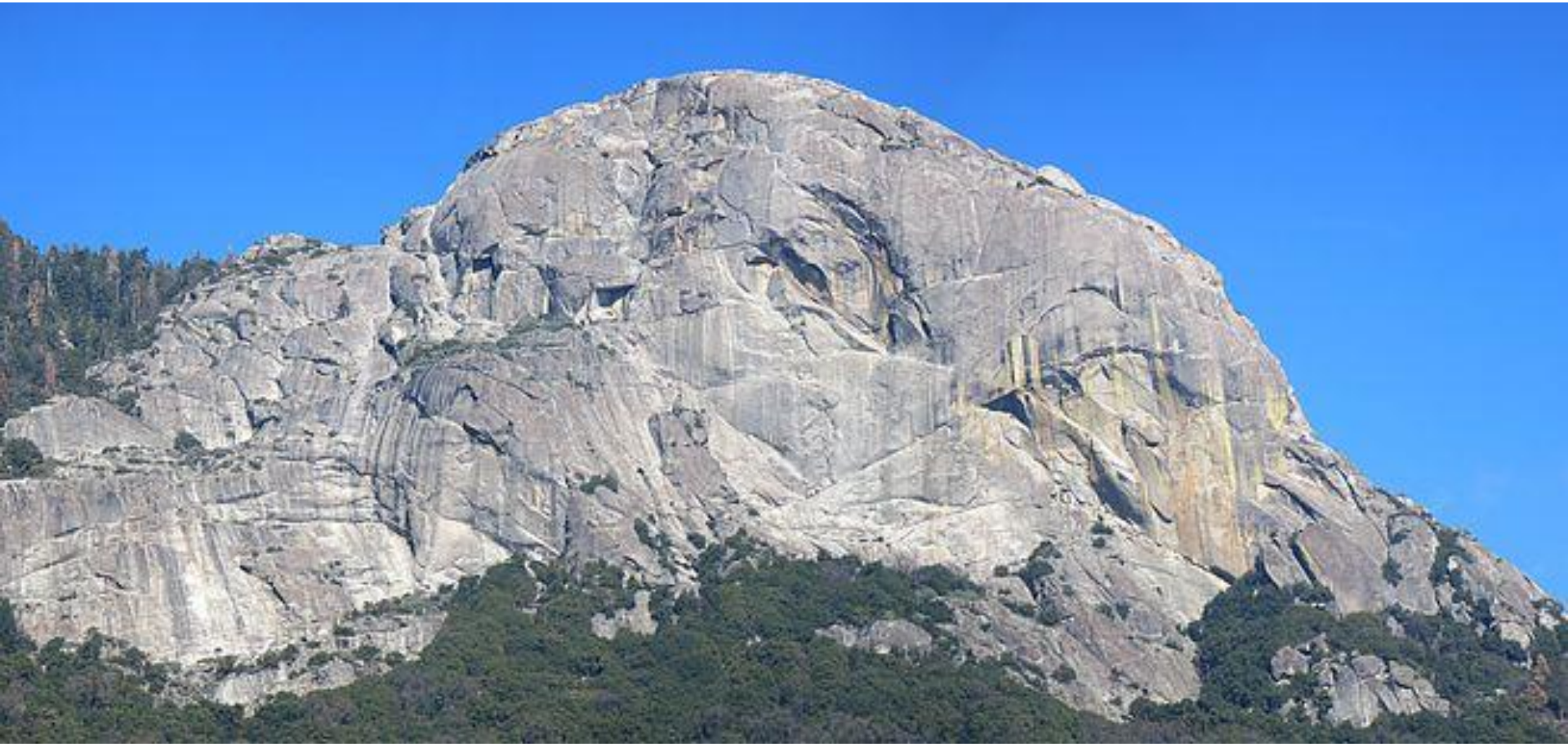
METEORIZACIÓN ESFEROIDAL



Caos de bolos, de bloques ou berrocal



DOMO GRANÍTICO



TORS OU CASTELOS

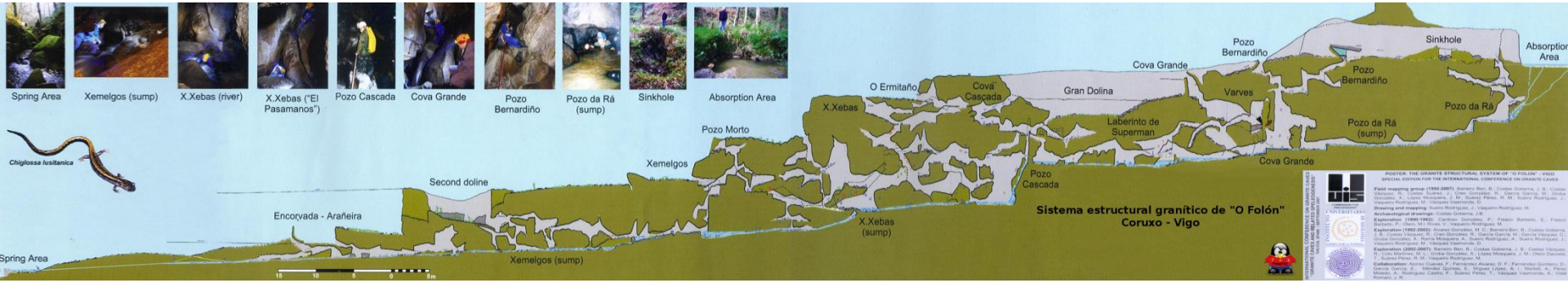
PEDRAS CABALEIRAS

MICROFORMAS

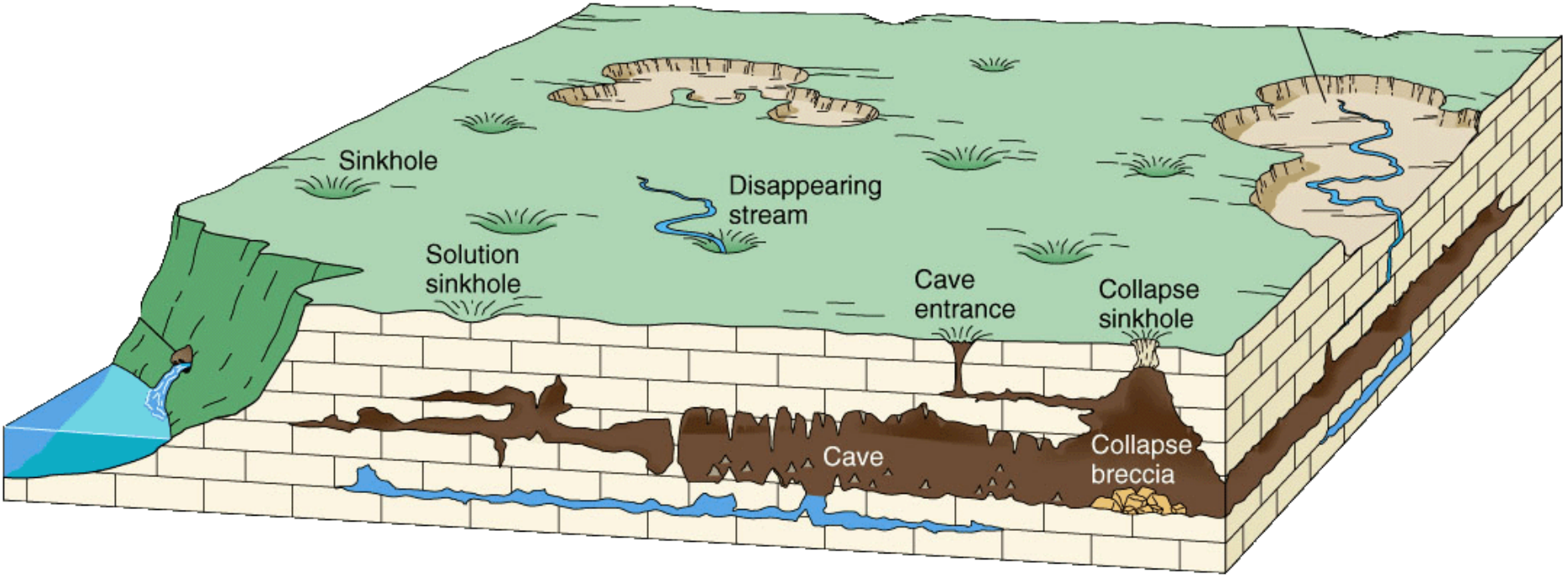

A meteorización do granito pode provocar cavidades na rocha chamadas pías ou taffonis como estas de Ézaro.

Vigo esconde un gran río subterráneo bajo el monte de Coruxo

La novena cueva granítica en longitud del mundo, y la tercera de la Europa occidental se encuentra enclavada en el municipio de Vigo, en concreto en Coruxo, pero probablemente pocos vecinos de la parroquia sabrían señalar su ubicación.

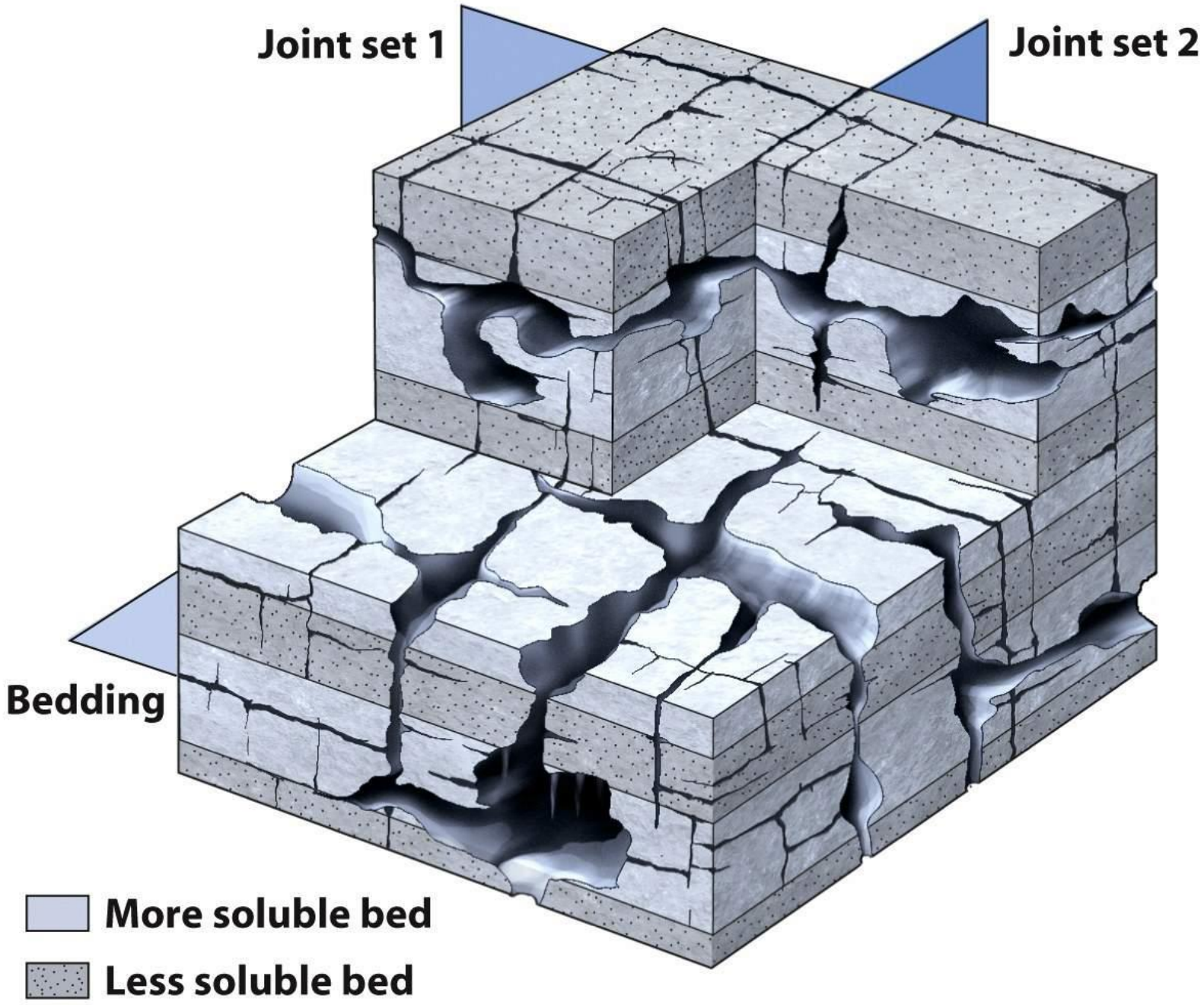


XEOMORFOLOXÍA CÁRSTICA



ACCIÓN DA AUGA SOBRE ROCHAS CARBONATADAS: CALIZAS, DOLOMÍAS

FORMAS SIMILARES NOUTRAS ROCHAS SOLUBLES


Joint set 1
Joint set 2
Bedding
More soluble bed
Less soluble bed

CARBONATACIÓN
(Equilibrio químico)

$$CO_2 + H_2O \longleftrightarrow H_2CO_3$$

$$H_2CO_3 + CaCO_3 \longleftrightarrow Ca(HCO_3)_2$$

$$CO_{2\,(g)} + H_2O + CaCO_{3\,(s)} \rightleftharpoons Ca(HCO_3)_{2\,(aq)}$$

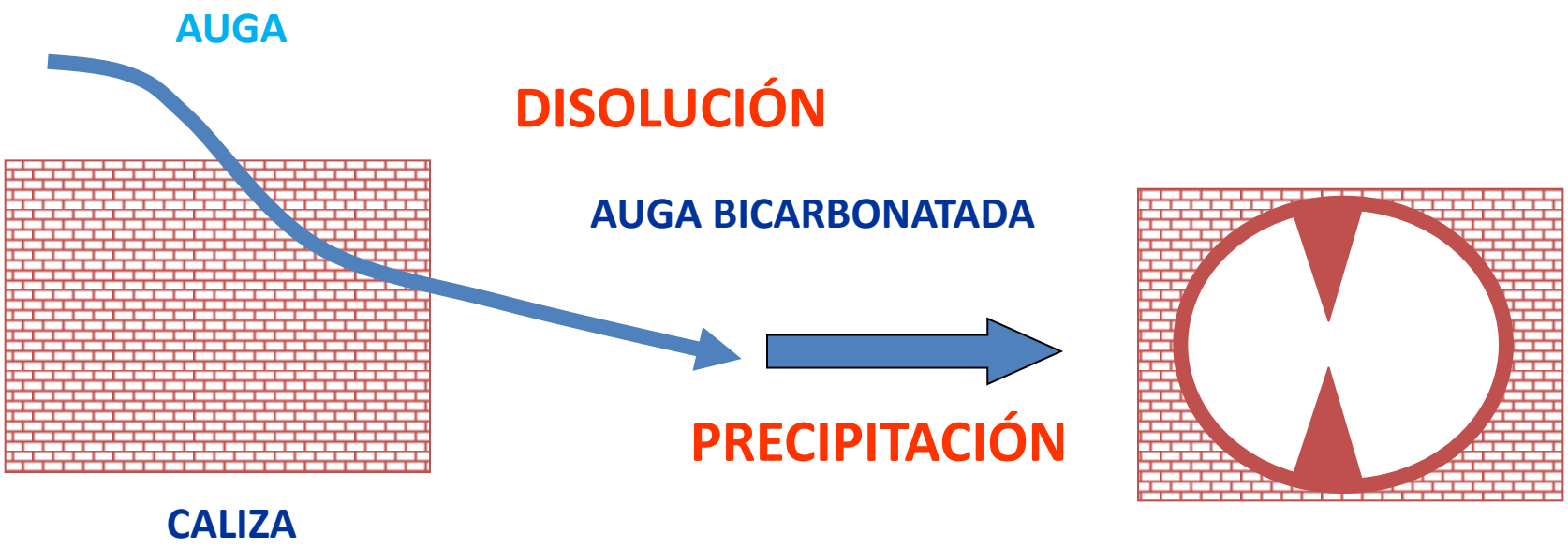
MOITO CO_2 ? $\longrightarrow$

POUCO CO_2 ? $\longleftarrow$

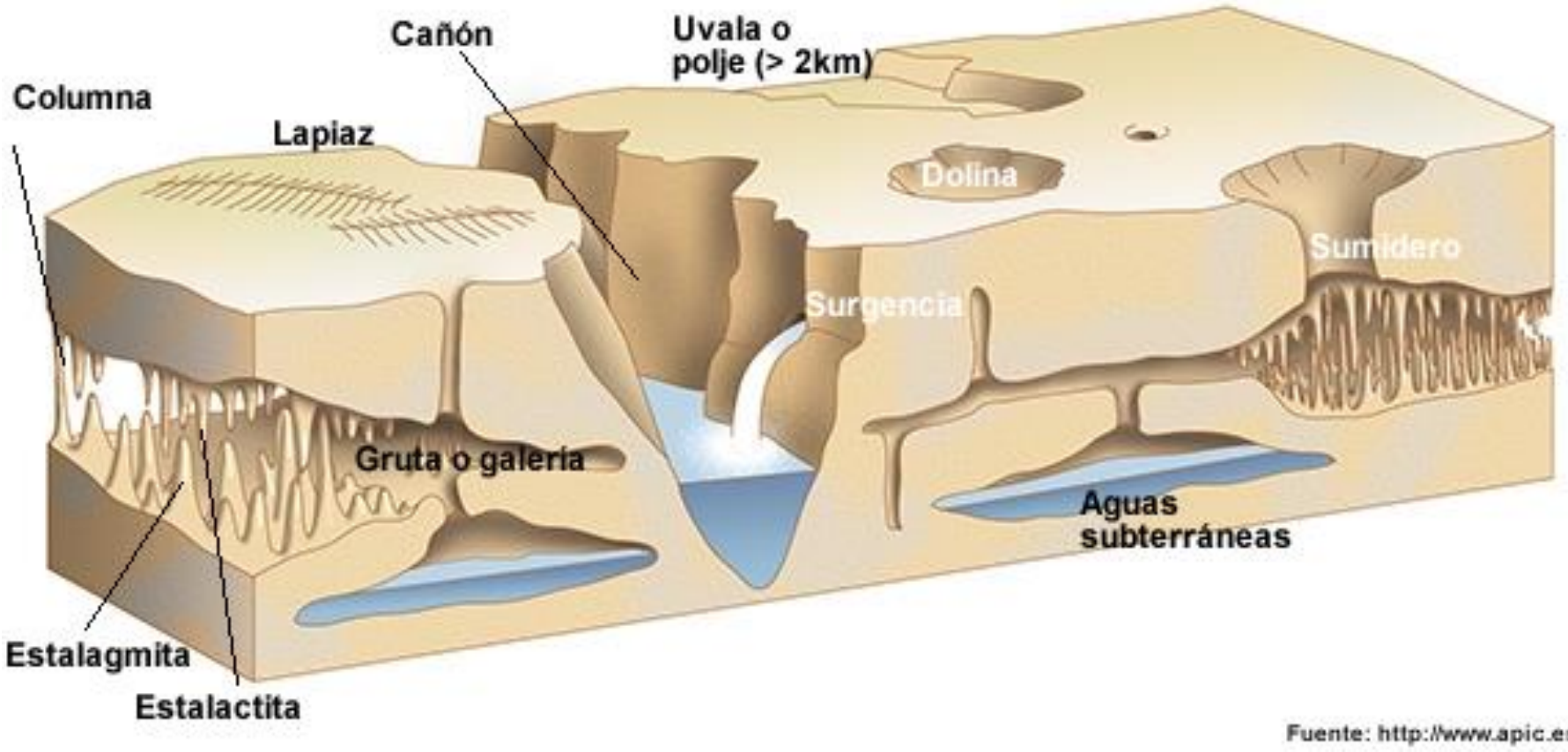
CALIZAS $CaCO_3$

DOLOMÍAS $(Ca,Mg)CO_3$

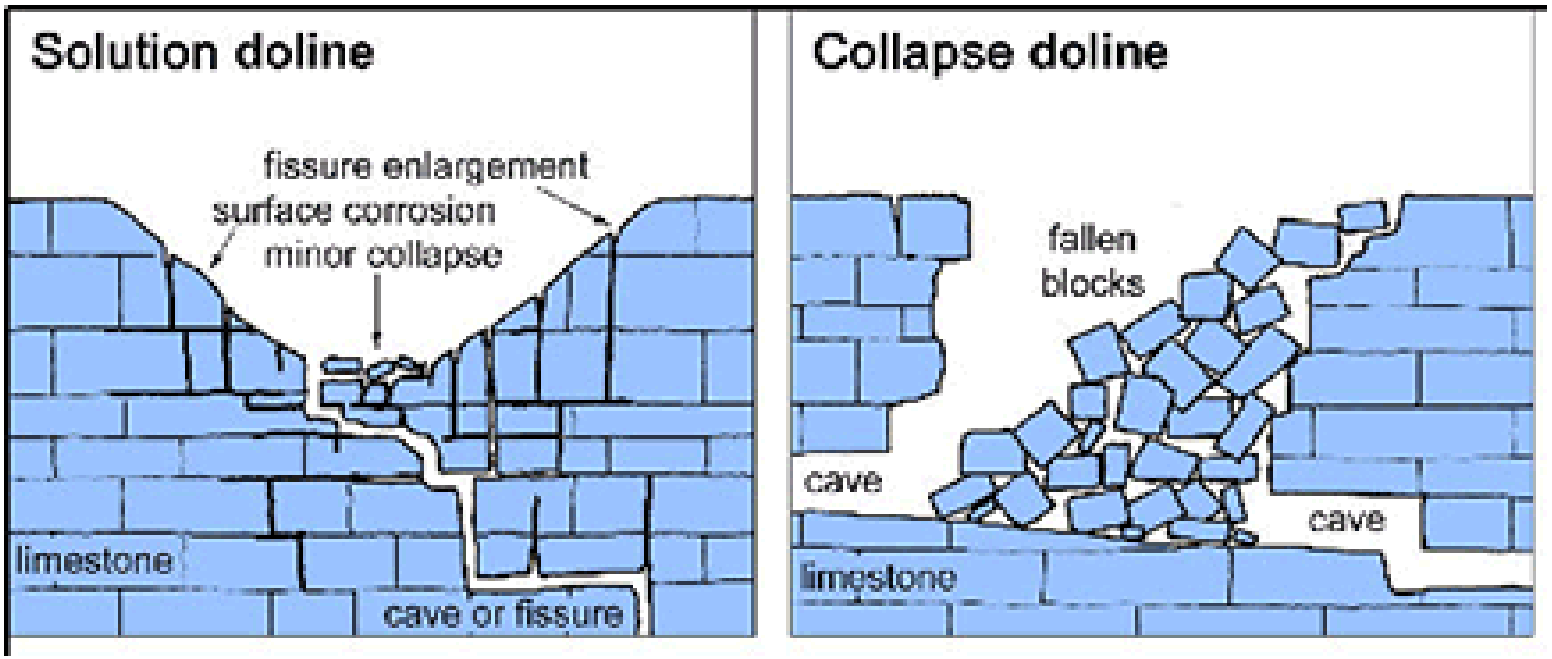
EQUILIBRIO DISOLUCIÓN-PRECIPITACIÓN

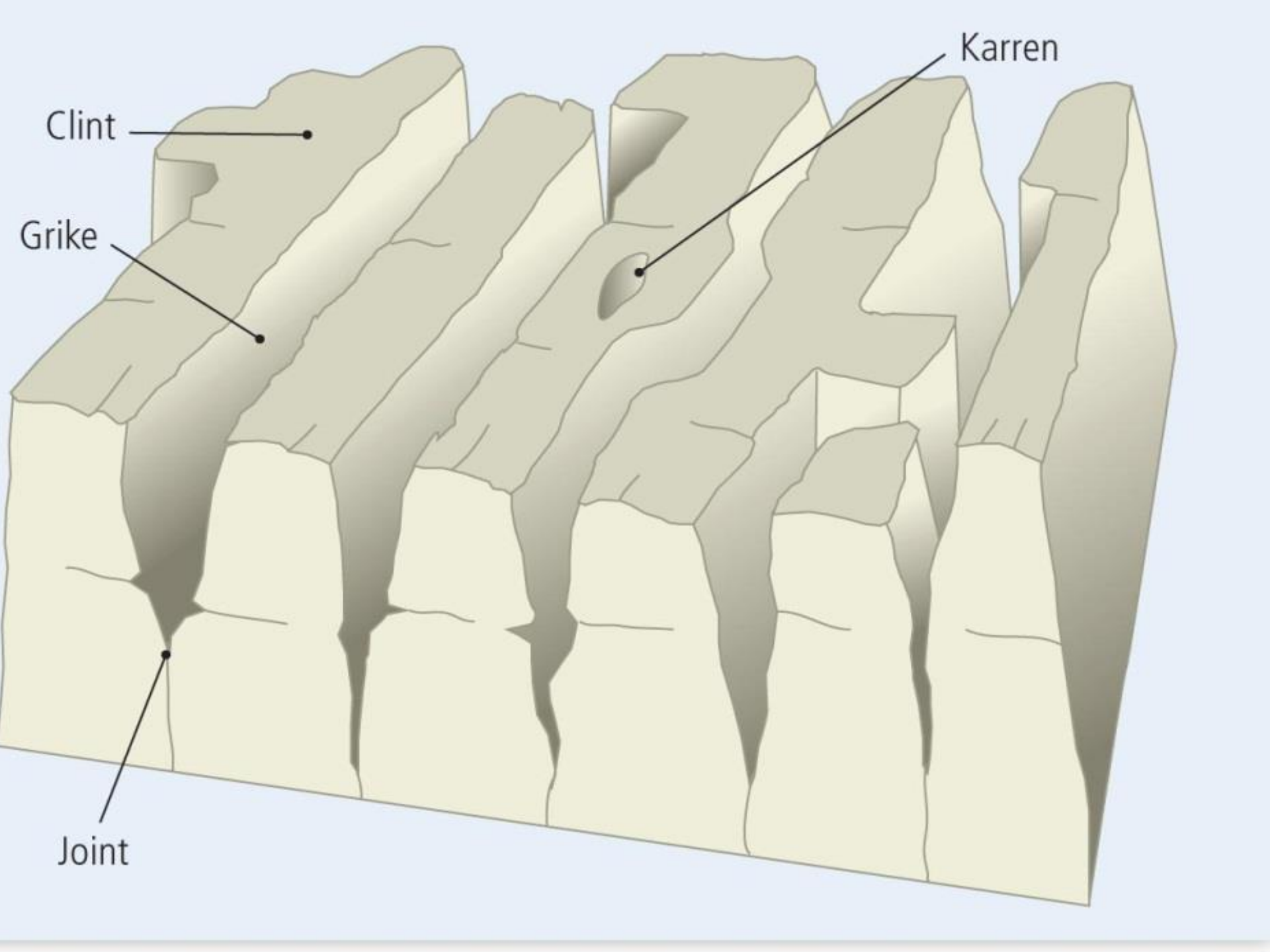


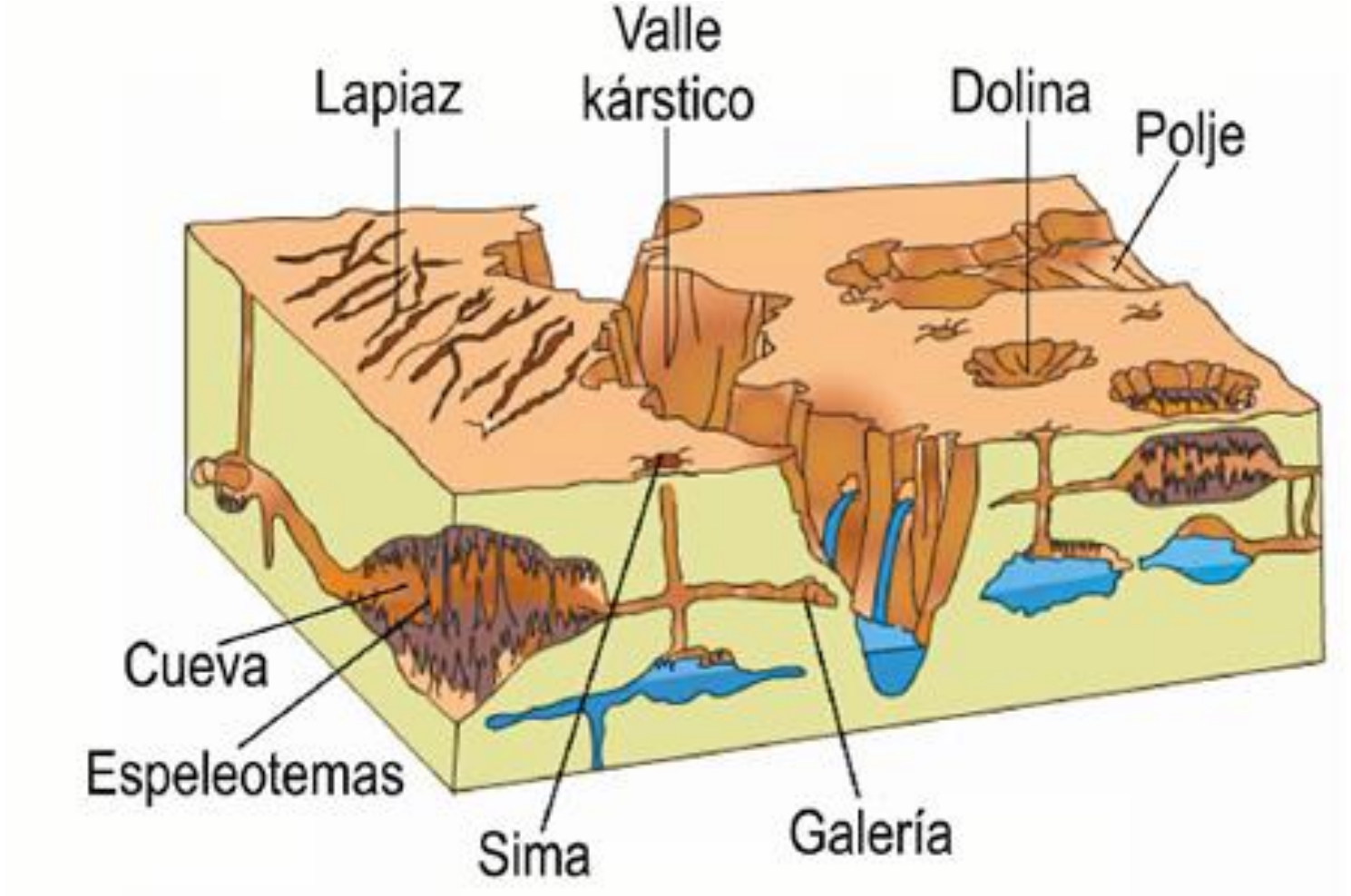
FORMAS CÁRSTICAS
DISOLUCIÓN - PRECIPITACIÓN

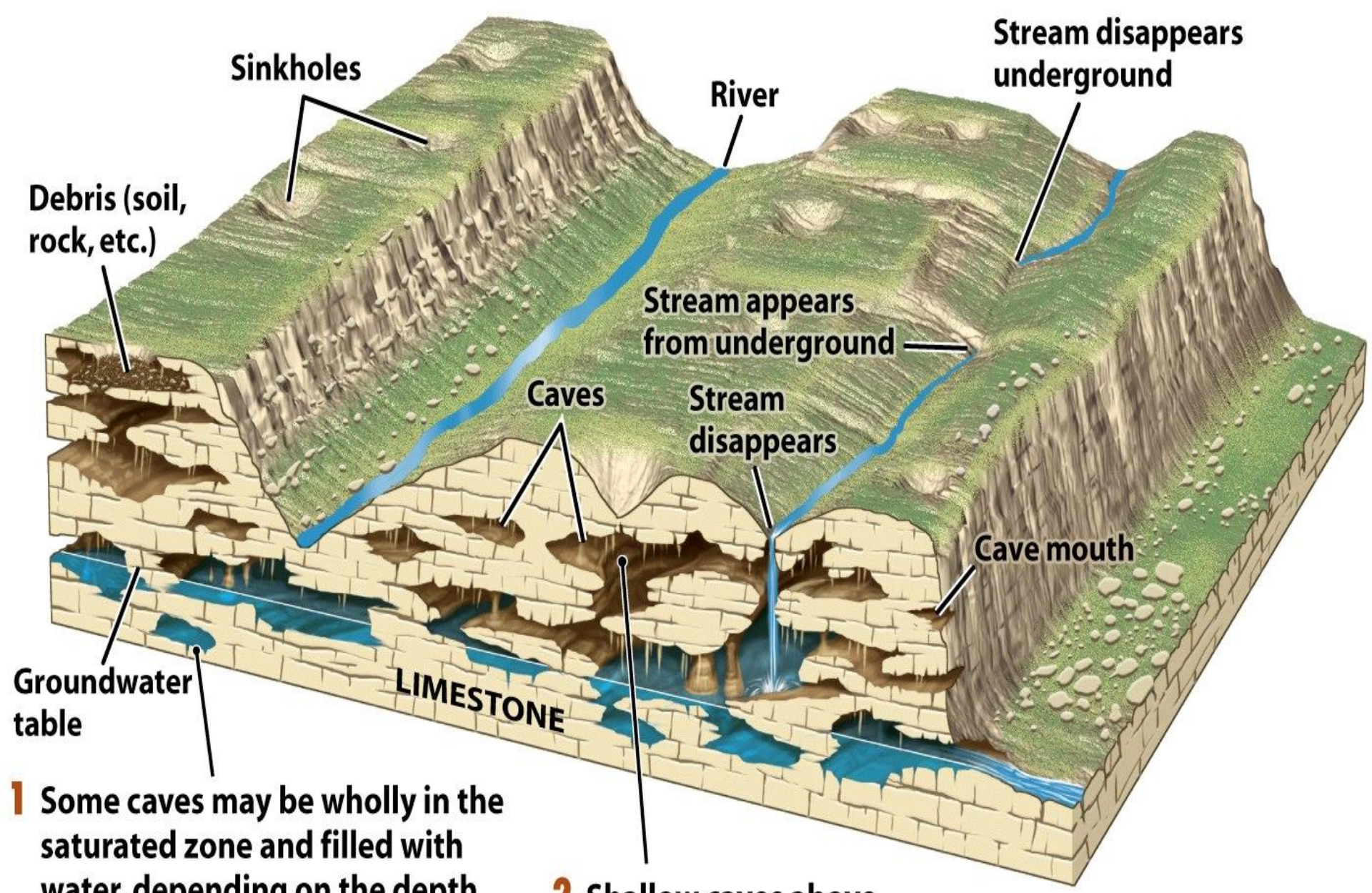


DOLINAS


Solution doline
fissure enlargement
surface corrosion
minor collapse
limestone
cave or fissure
Collapse doline
fallen
blocks
cave
cave
limestone


Karren
Clint
Grike
Joint


Valle
kárstico
Lapiaz
Dolina
Polje
Cueva
Espeleotemas
Sima
Galería

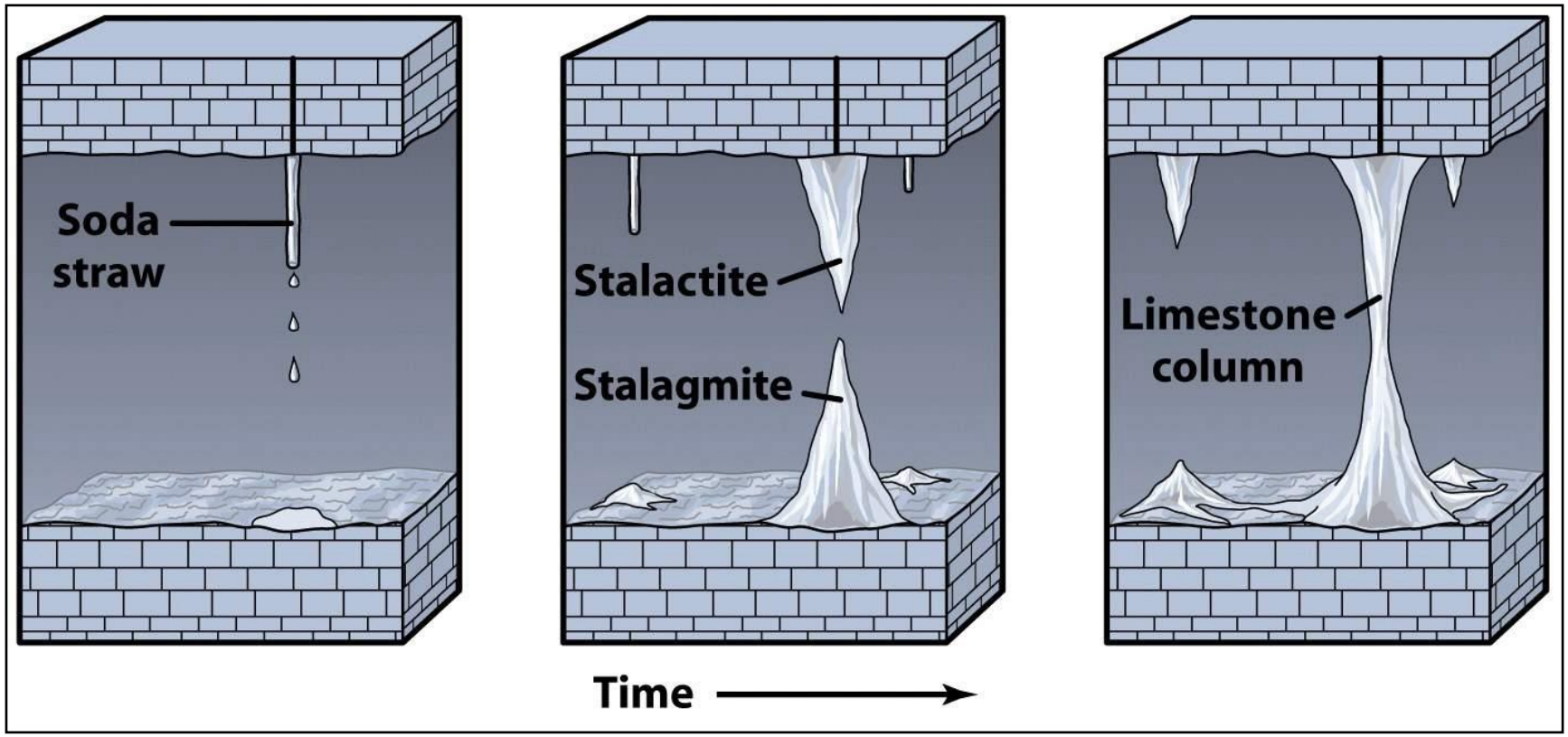


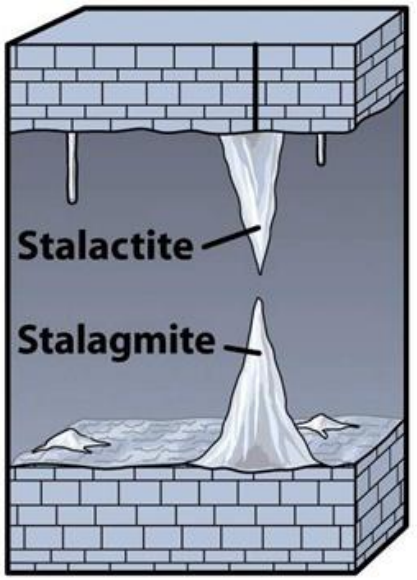
1 Some caves may be wholly in the saturated zone and filled with water, depending on the depth of the groundwater table.

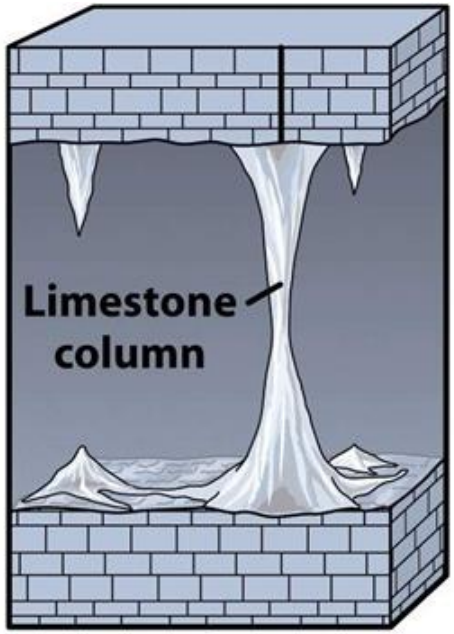
2 Shallow caves above the groundwater table are filled with air.

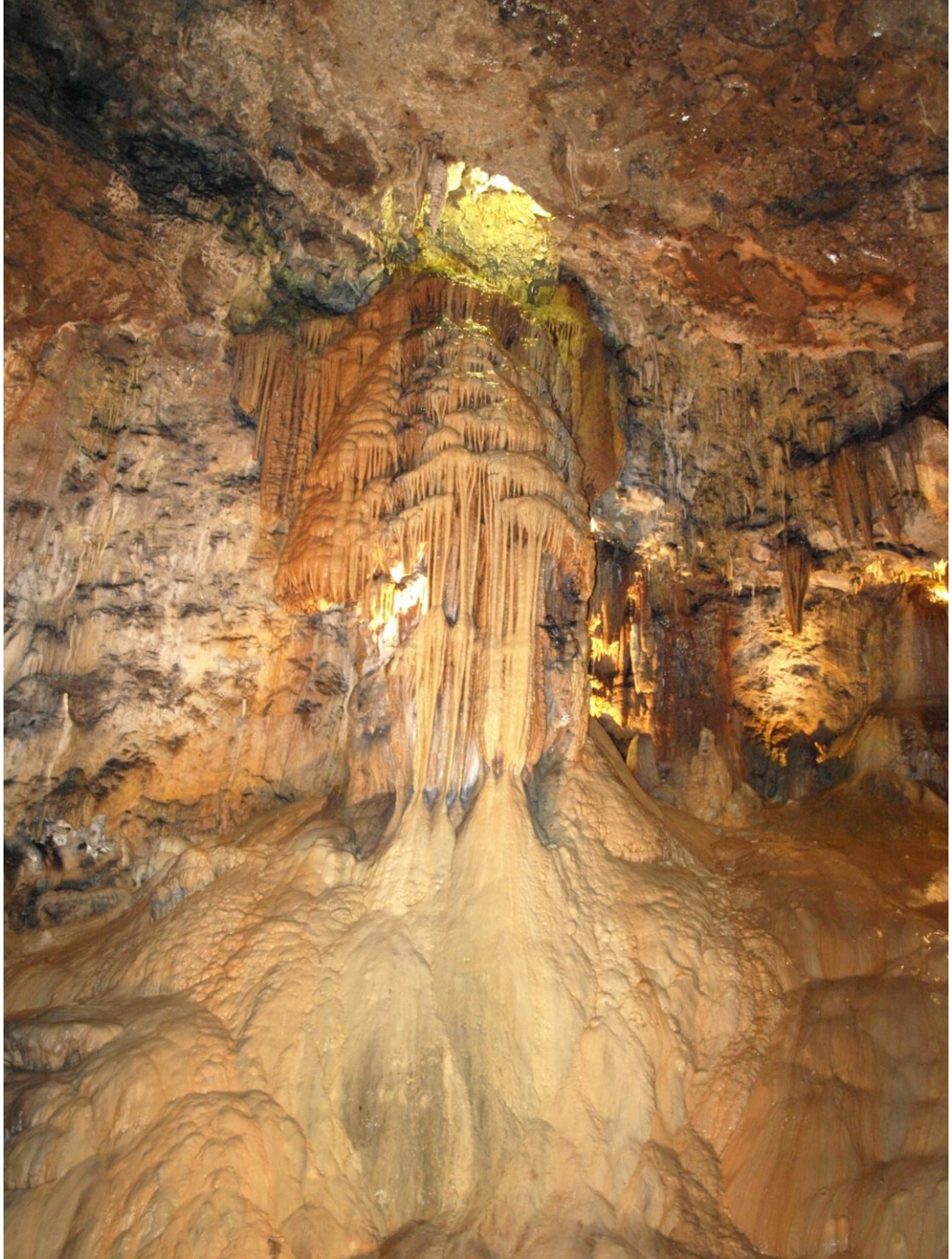
VALES CÁRSTICOS
ARXILAS DE DESCALCIFICÁCIÓN

FORMAS DE PRECIPITACIÓN
ESPELEOTEMAS

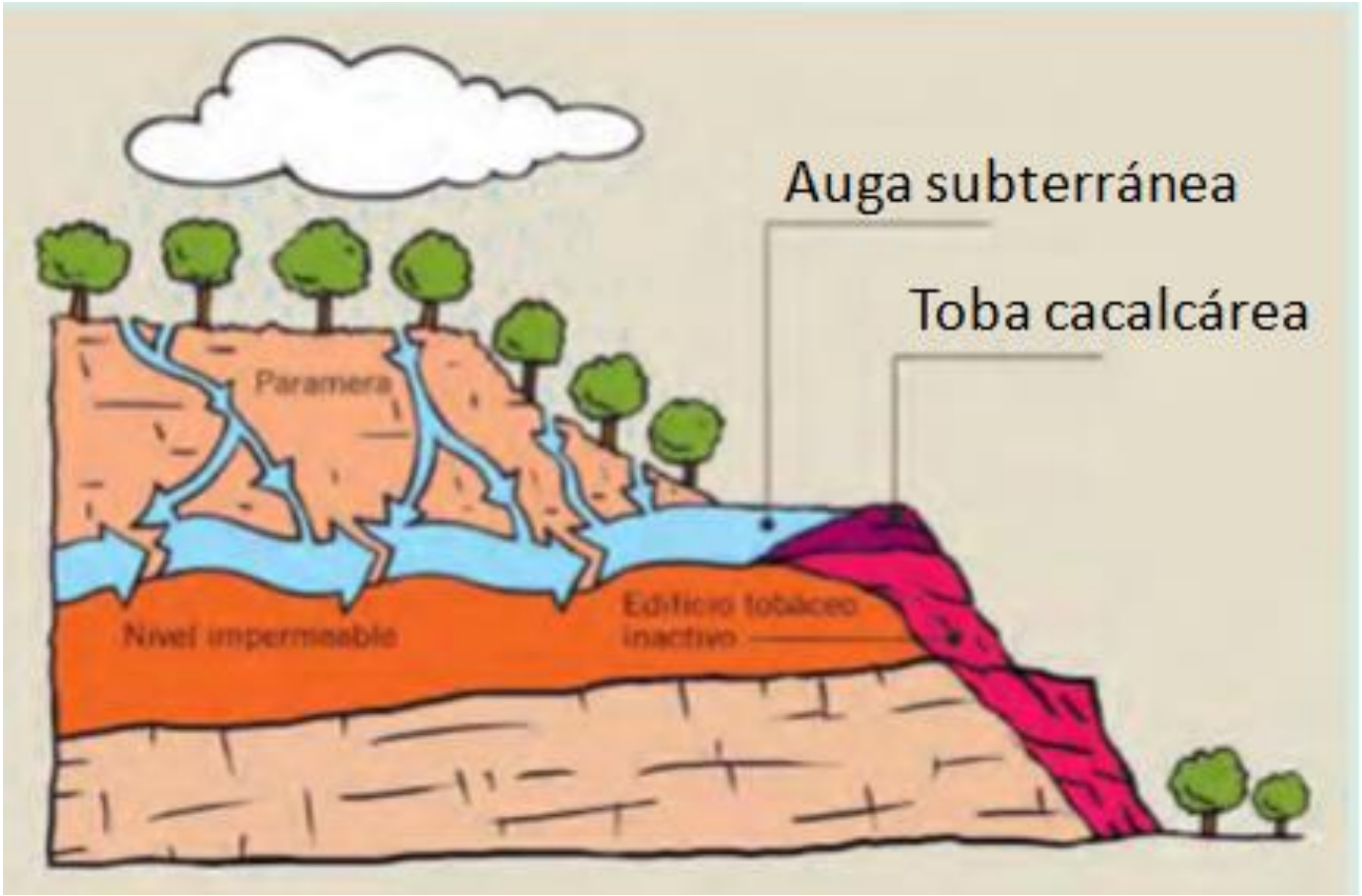



Stalactite
Stalagmite


Limestone
column



TOBAS


Auga subterránea
Toba cacalcárea
Paramera
Nivel impermeable
Edificio tobáceo
inactivo

TOBAS - TRAVERTINOS ?

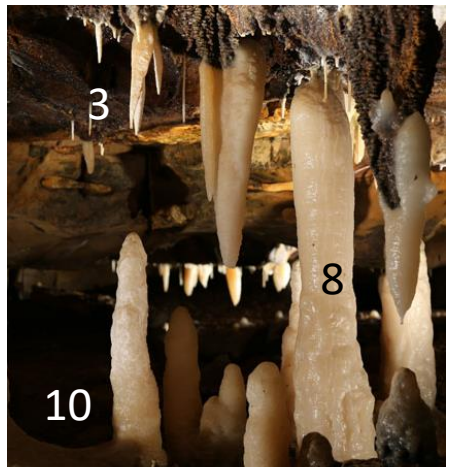
TEMPERATURA DA AUGA

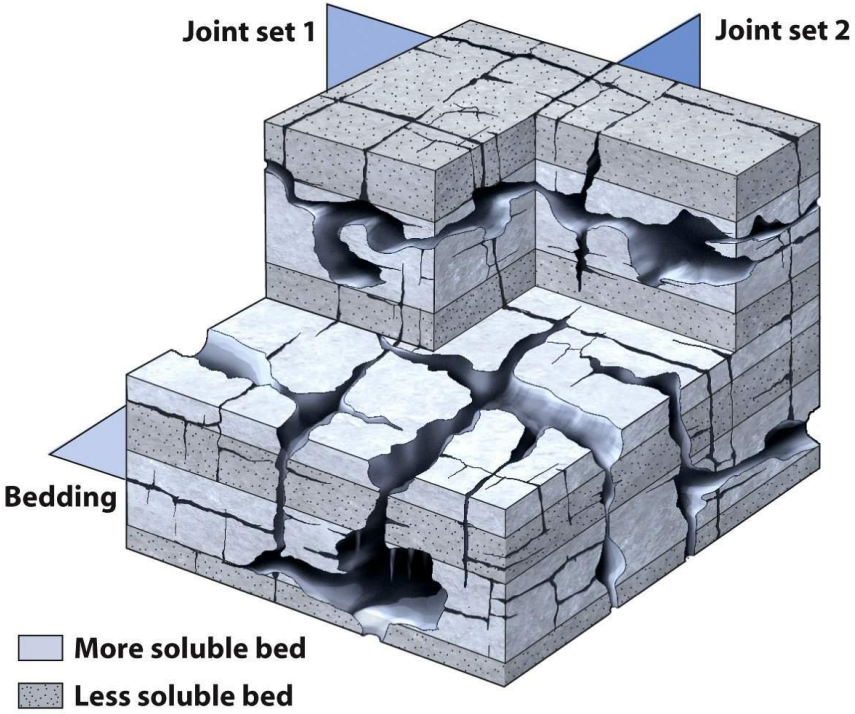
Formadas por precipitación de augas frías (ríos, fervenzas)

Formadas por precipitación de augas termais

FERVENZAS DE TRAVERTINO EN PAMUKALE (TURQUÍA)

EXERCICIO 7





CARBONATACIÓN
(Equilibrio químico)

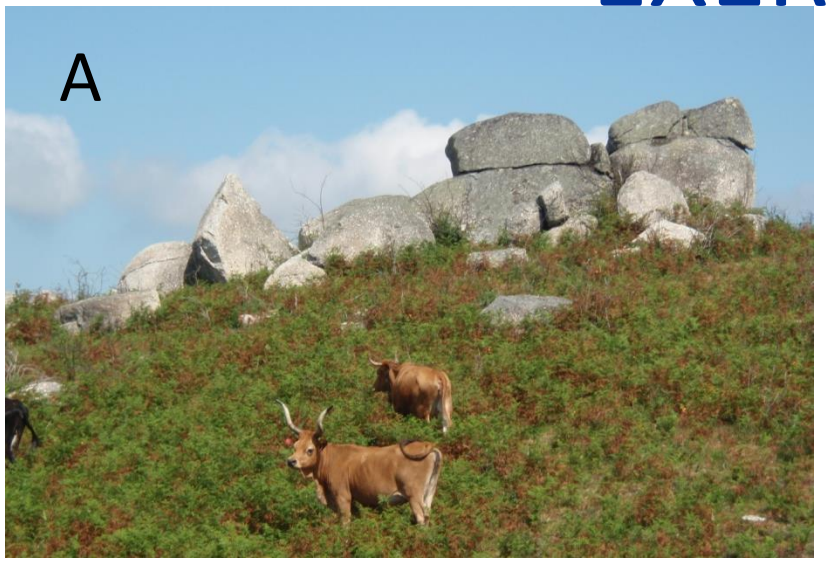
$$CO_2 + H_2O \longleftrightarrow H_2CO_3$$

$$H_2CO_3 + CaCO_3 \longleftrightarrow Ca(HCO_3)_2$$

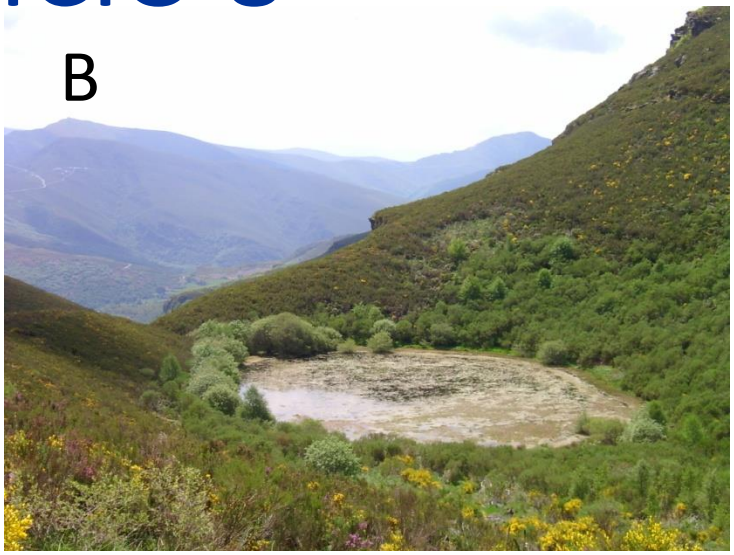
$$CO_{2\,(g)} + H_2O + CaCO_{3\,(s)} \rightleftharpoons Ca(HCO_3)_{2\,(aq)}$$

EXERCICIO 8

A



B



C

D