

ROCHAS SEDIMENTARIAS



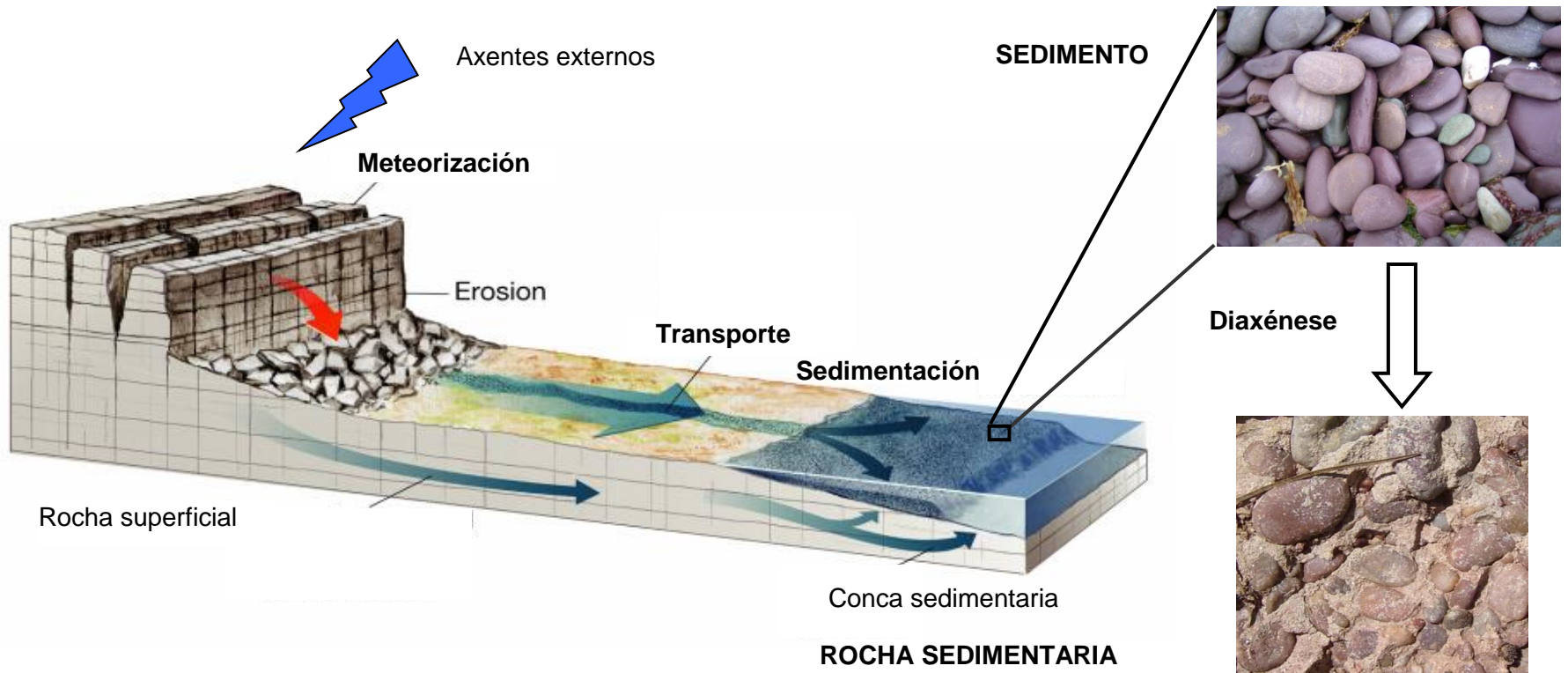
P A R T E I

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- **A formación das rochas sedimentarias**
 - a) **Meteorización**
 - b) **Transporte**
 - c) **Sedimentación**
 - d) **Diagénesis**
- **Estructuras sedimentarias: A estratificación**
- **Clasificación das rochas sedimentarias**
 - a) **Rochas sedimentarias detríticas**
 - b) **Rochas sedimentarias de precipitación**
 - c) **Rochas orgánicas**
- **Ambientes sedimentarios**



A formación das rochas sedimentarias



The Making Of **SEDIMENTARY ROCKS**

1. WEATHERING /
EROSION



3. DEPOSITION



2. TRANSPORT



4. CEMENTATION /
LITHIFICATION



METEORIZACIÓN

Alteración e disgregación

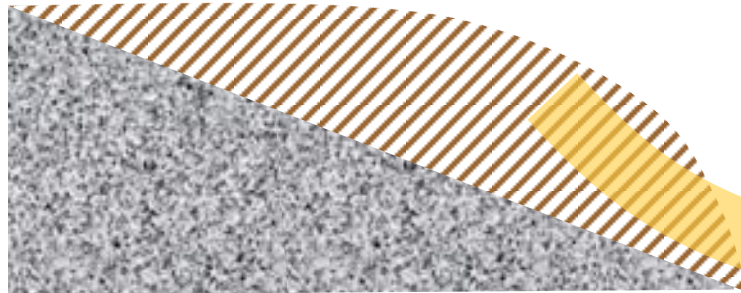
AXENTES EXTERNOS

ATMOSFERA

HIDROSFERA

SERES VIVOS

CAMBIOS TEMPERATURA



ROCHA SUPERFICIAL

PRODUCTOS DA
METEORIZACIÓN

SÓLIDOS

IÓNS EN DISOLUCIÓN

PRODUCTOS DA METEORIZACIÓN

• SÓLIDOS

- Fragmentos inalterados das rochas preexistentes.
- Novos minerais orixinados por meteorización química.

• SOLUTOS

- Ións en disolución orixinados por meteorización química.

TRANSPORTE DO MATERIAL



OS PRODUCTOS DA METEORIZACIÓN

son transportados

Axentes de transporte

CARGA

FRACCIÓN DETRÍTICA

Cantos
Areas
Limos
Arxilas

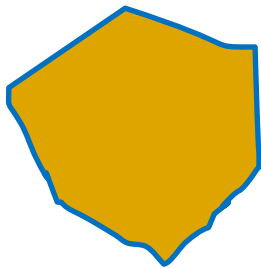
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FRACCIÓN DISOLTA: solutos

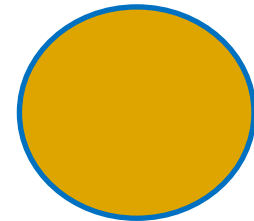
AXENTE DE TRANSPORTE

- Leva a carga dun sitio a outro
- Modifica o material transportado:
 - abrasión → redondeamento
 - selección por tamaños

...



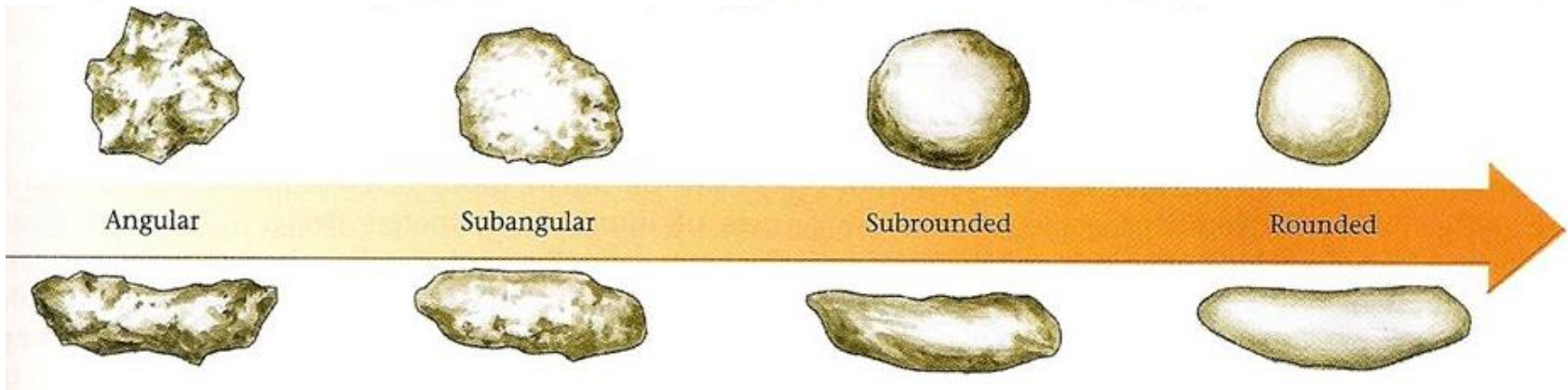
TRANSPORTE



FRAGMENTO
ORIXINAL

GRAO DE MADUREZ TEXTURAL DUN SEDIMENTO

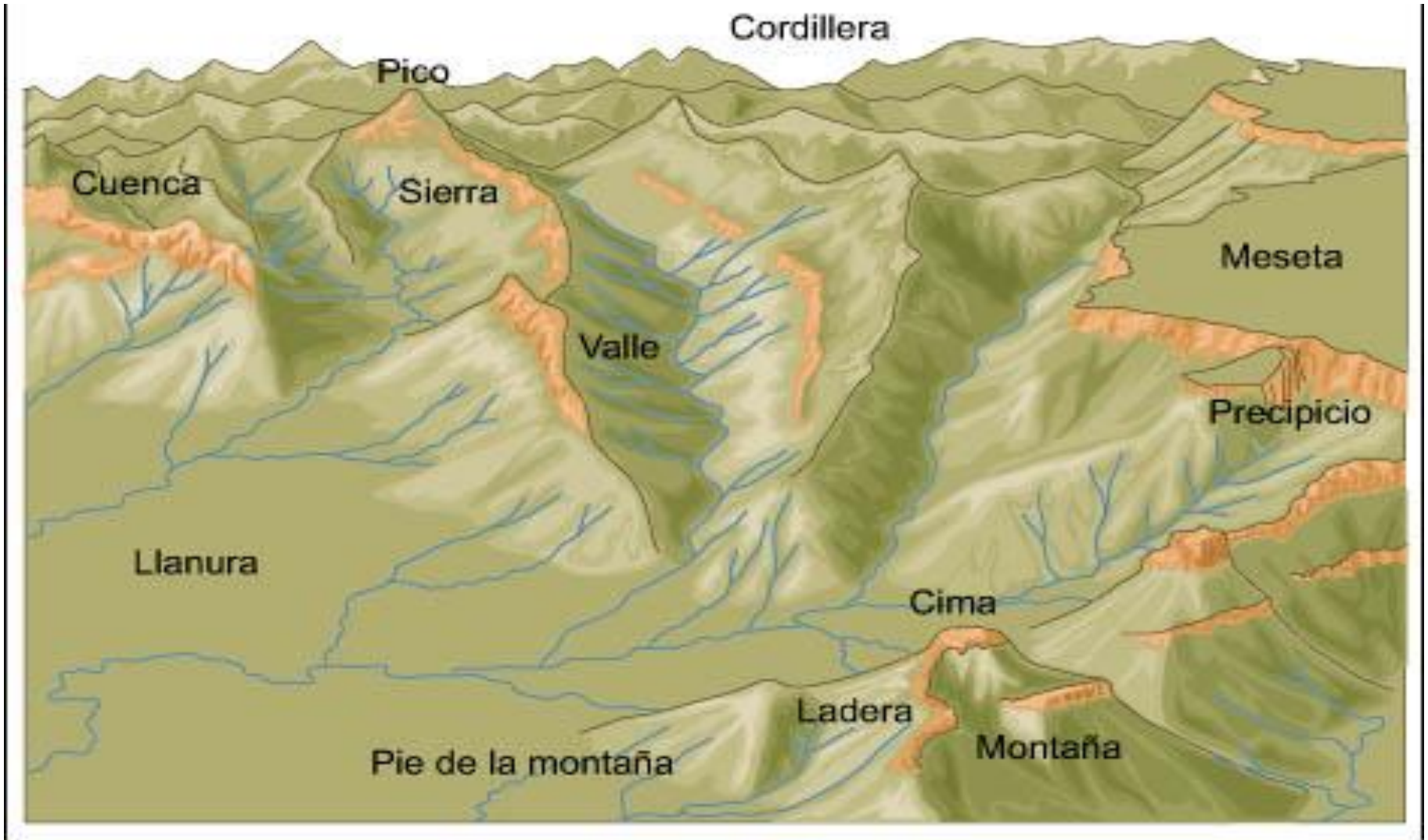
CLASIFICACIÓN - REDONDEAMIENTO



OS RIOS

(CURSOS DE AUGA PERMANENTE)

PRINCIPAL AXENTE DE TRANSPORTE



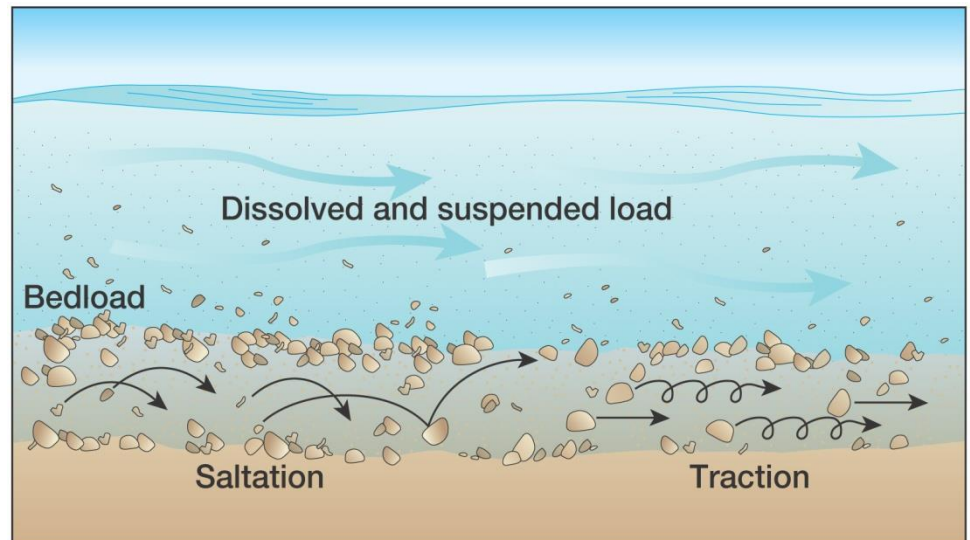
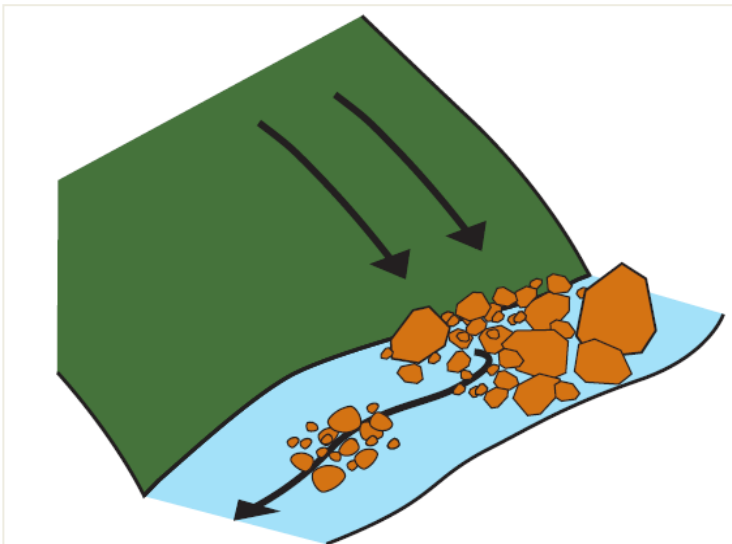
TRANSPORTE FLUVIAL

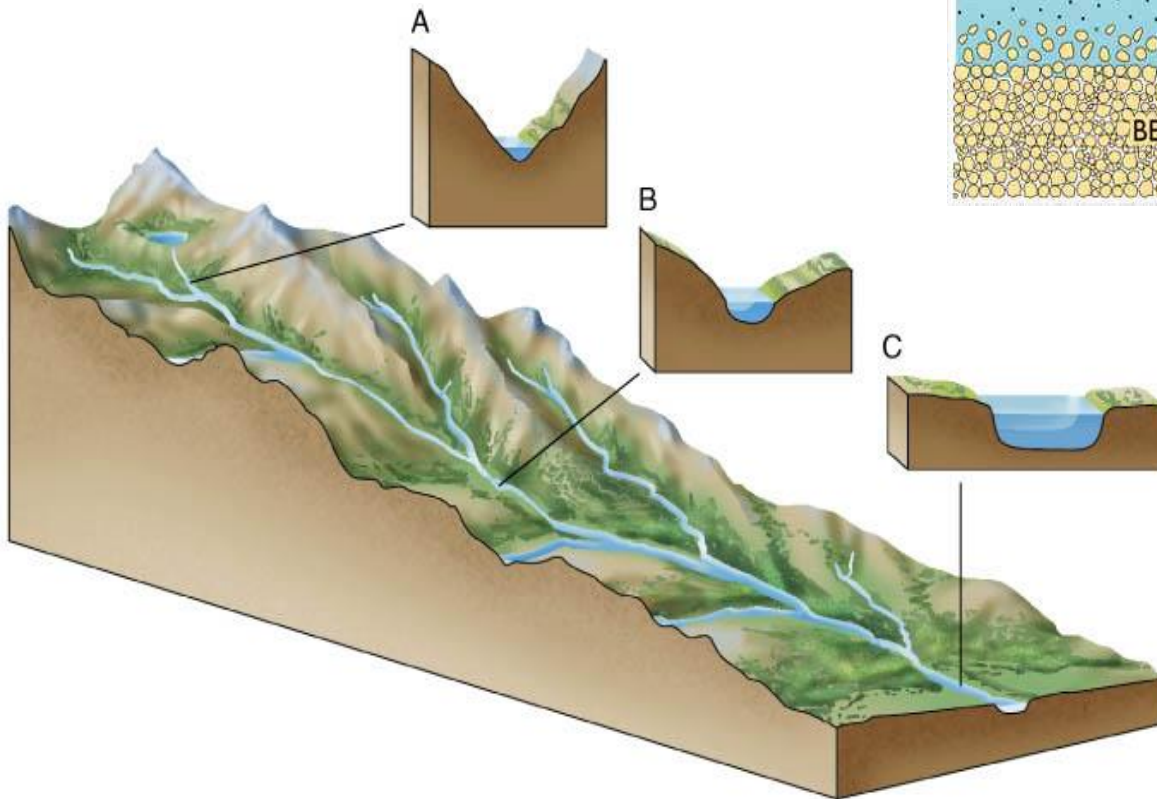
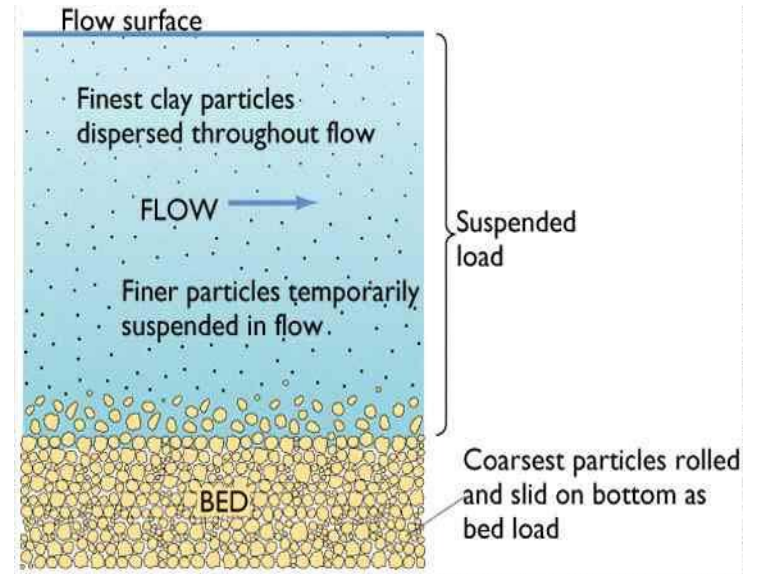
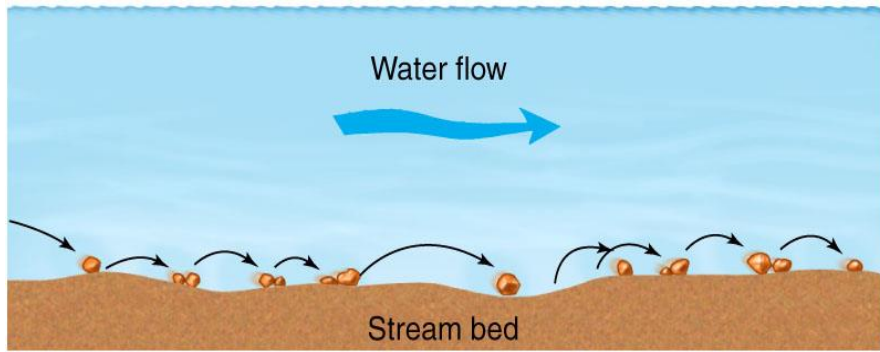
Depende do caudal (cantidad de auga e velocidade)

Carga de fondo (cantos, gravas e areas)

Carga en suspensión (limos e arxilas)

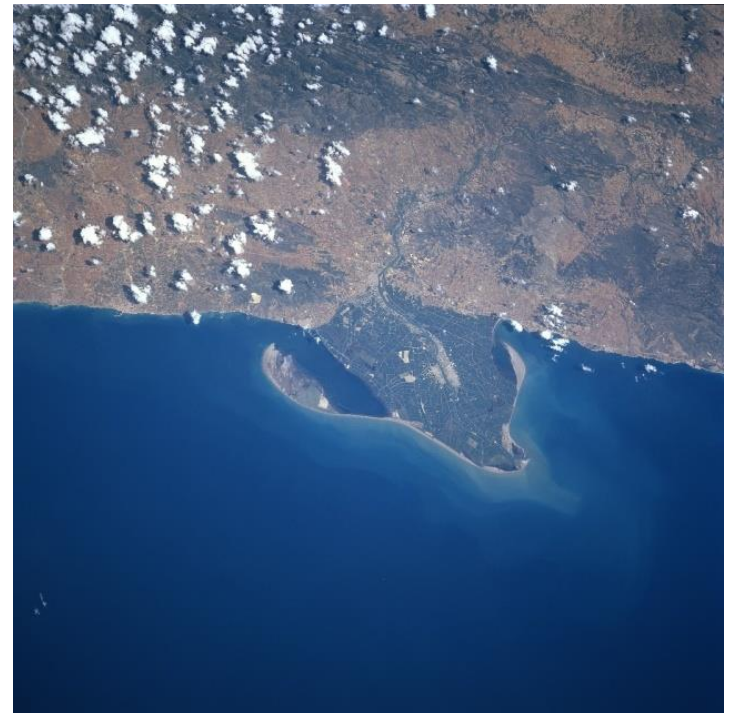
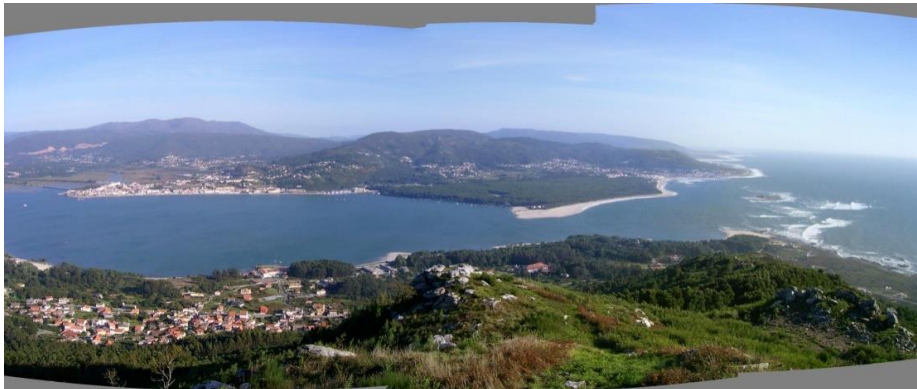
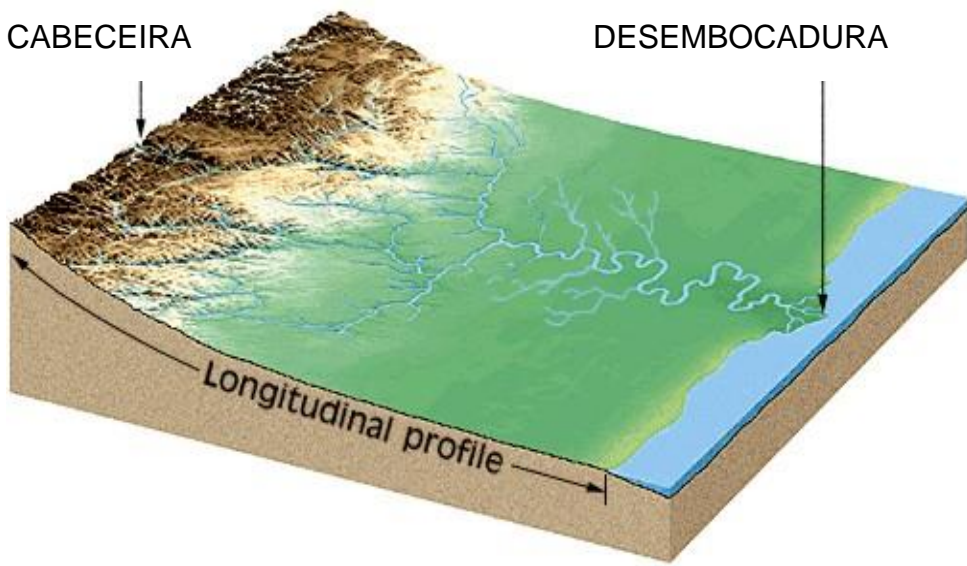
Carga en disolución (ións)



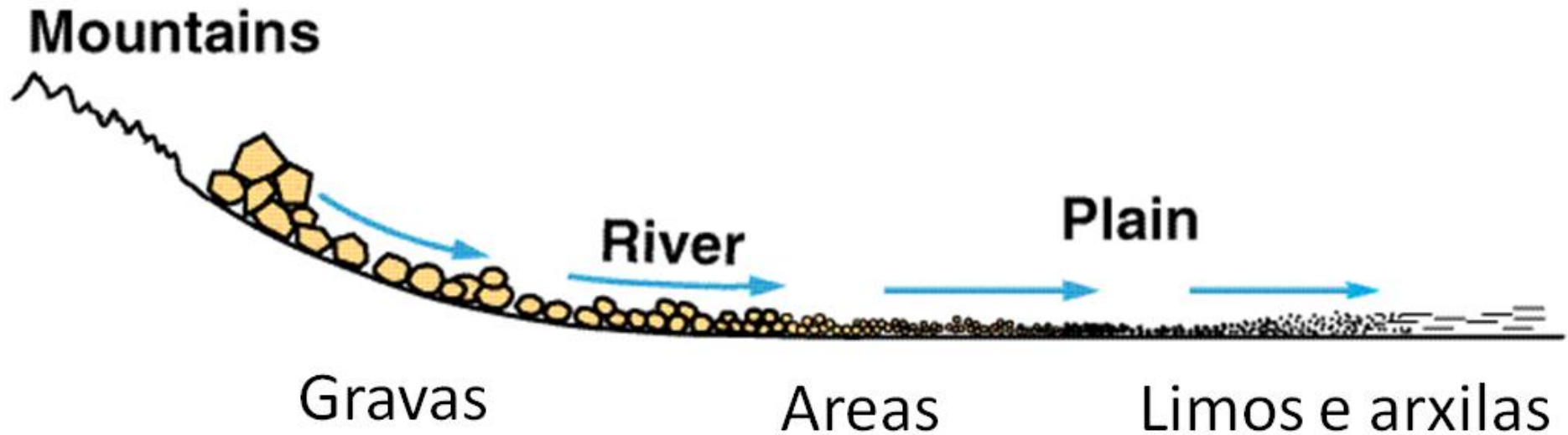


CABECEIRA

DESEMBOCADURA



Sedimentos fluviais

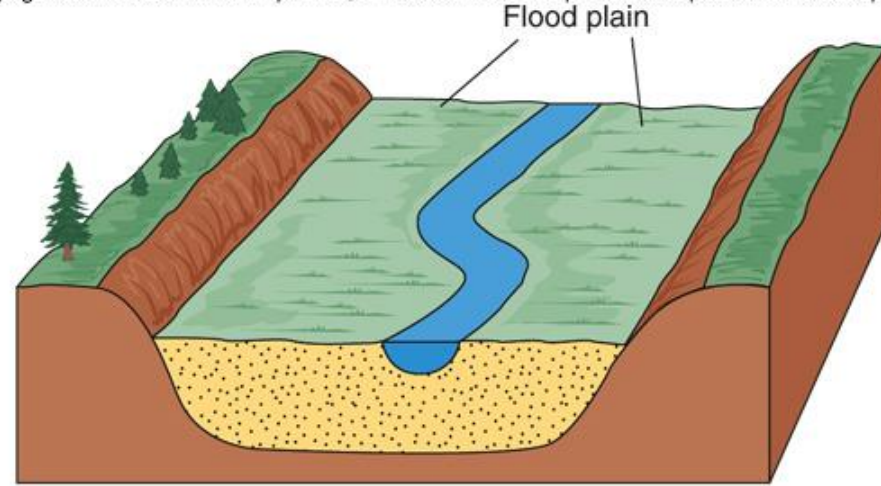


Perda gradual da capacidade de transporte.

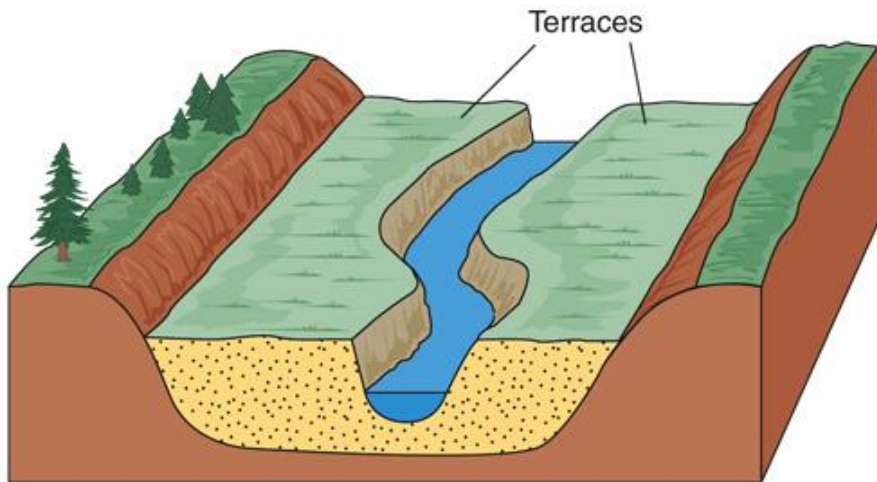
Redondeamento e classificação.

SEDIMENTOS DE TERRAZA FLUVIAL

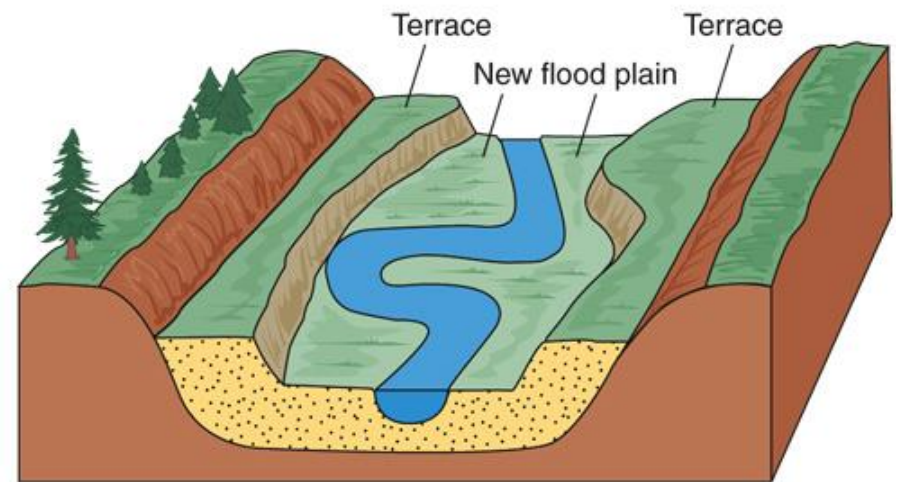
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A



B

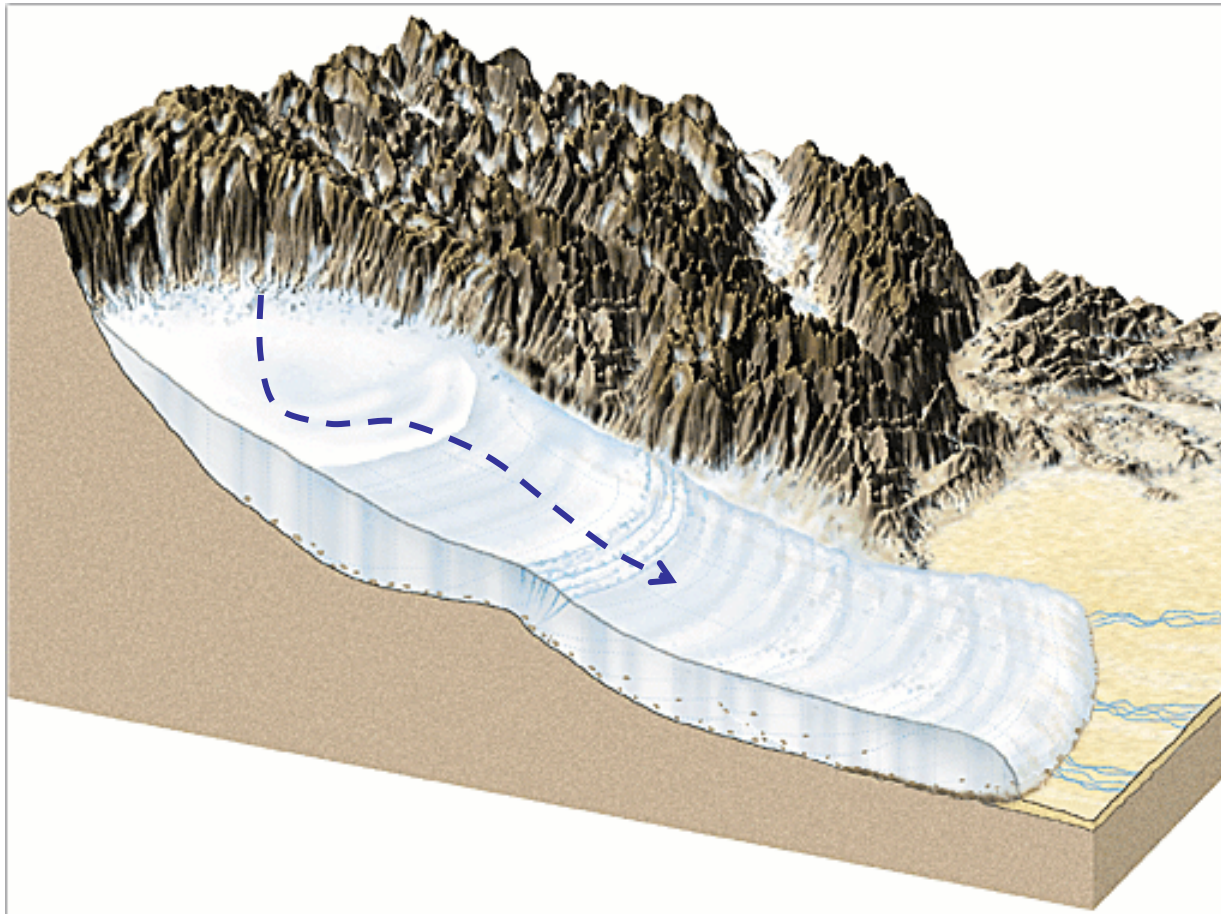


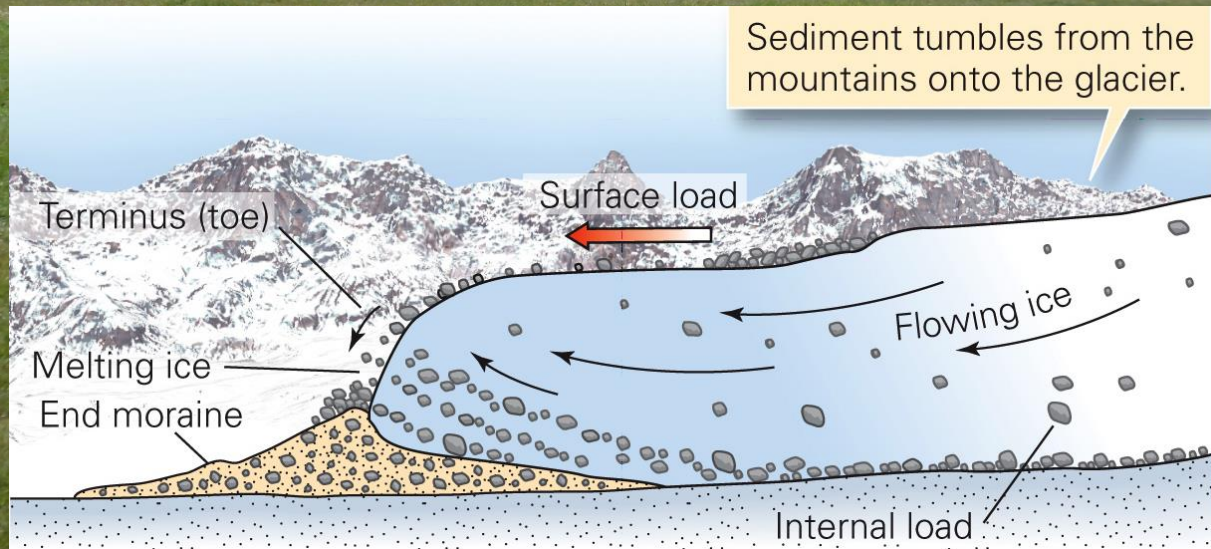
C

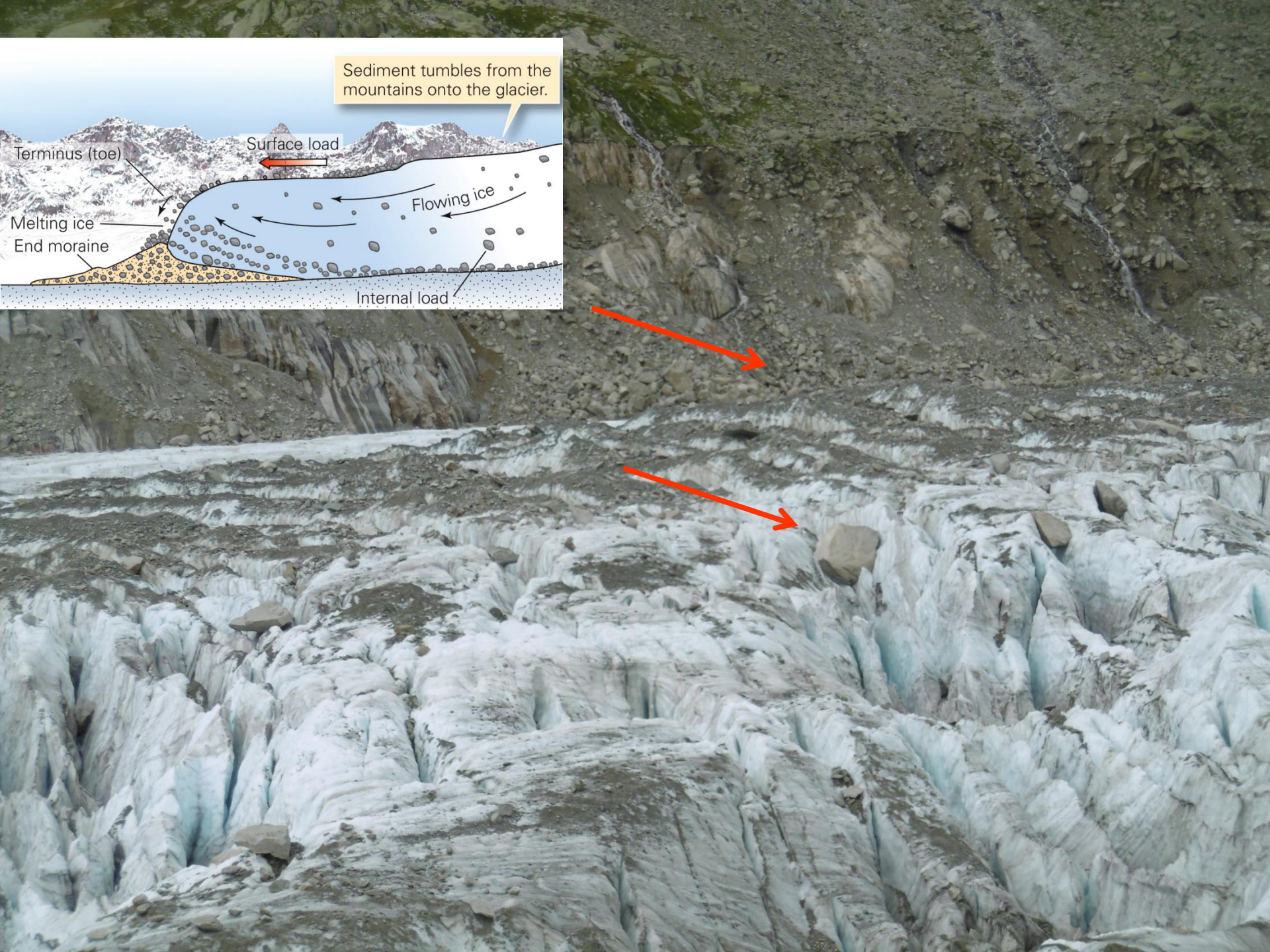
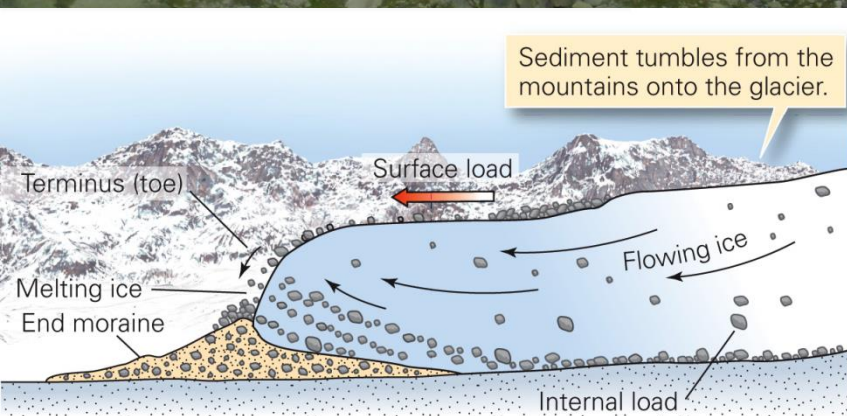


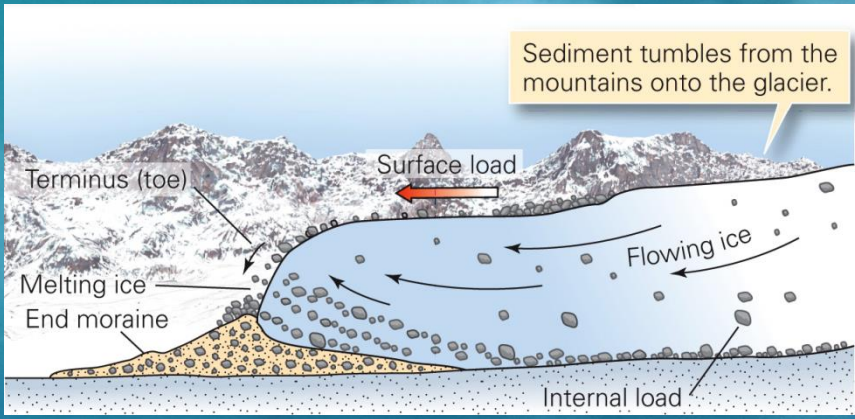
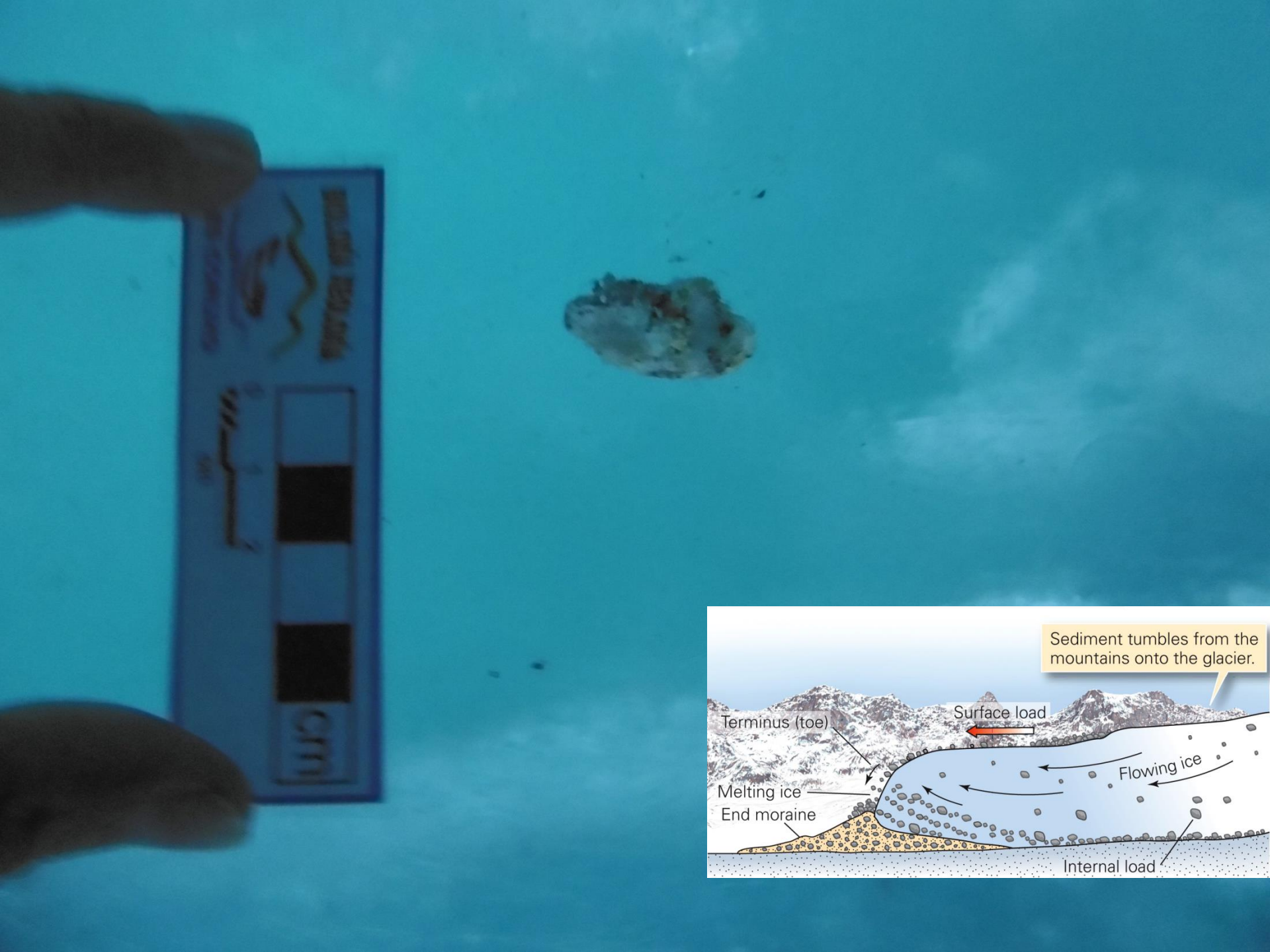
TRANSPORTE GLACIAR

O transporte prodúcese na masa de xeo que se desliza por un val en favor da gravidade.

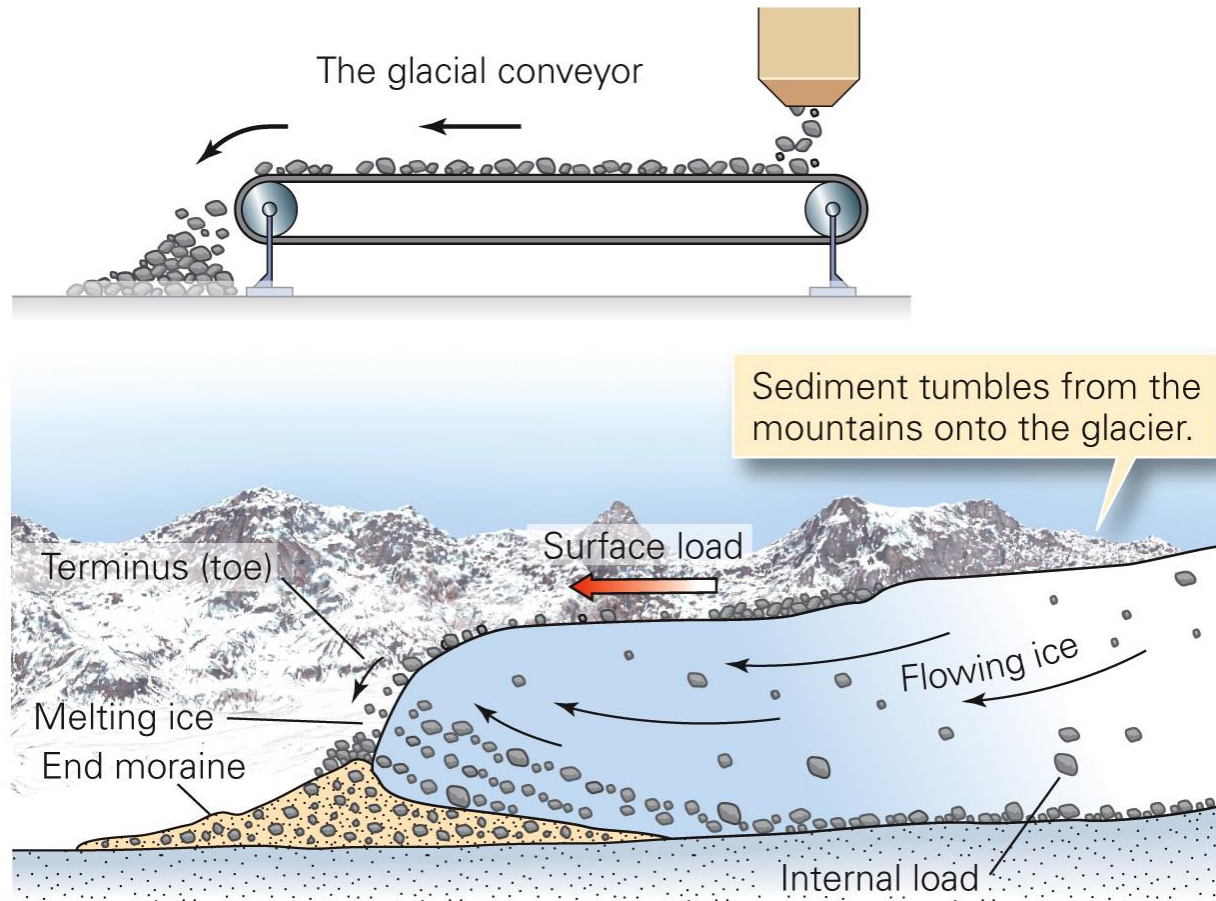








Sedimentos glaciares



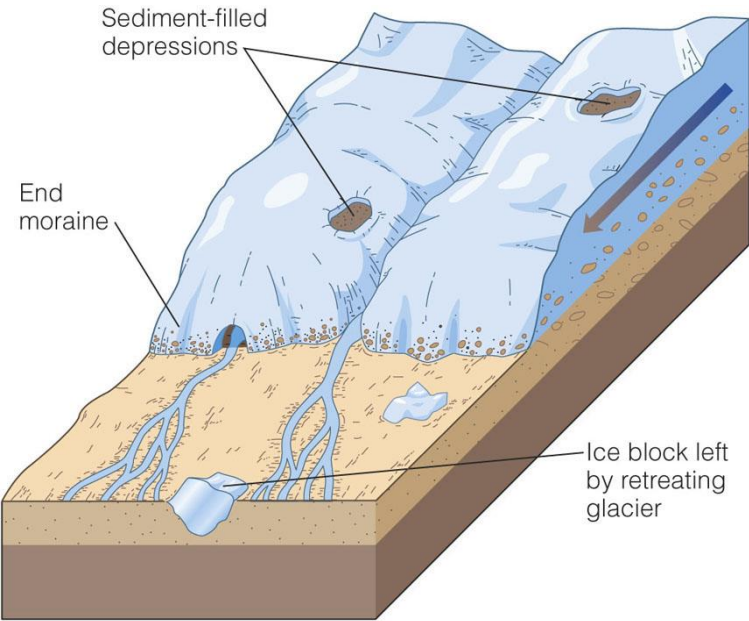
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Angulosos e mal clasificados

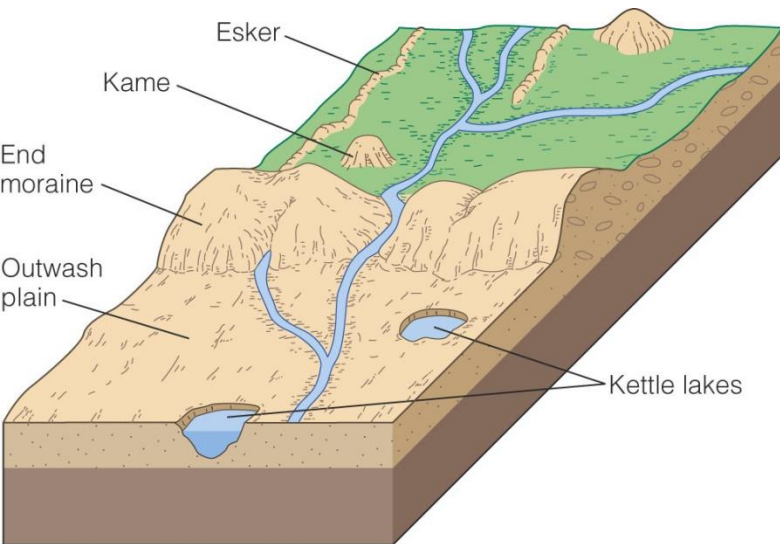
Depósitos glaciares (tills / morrenas)



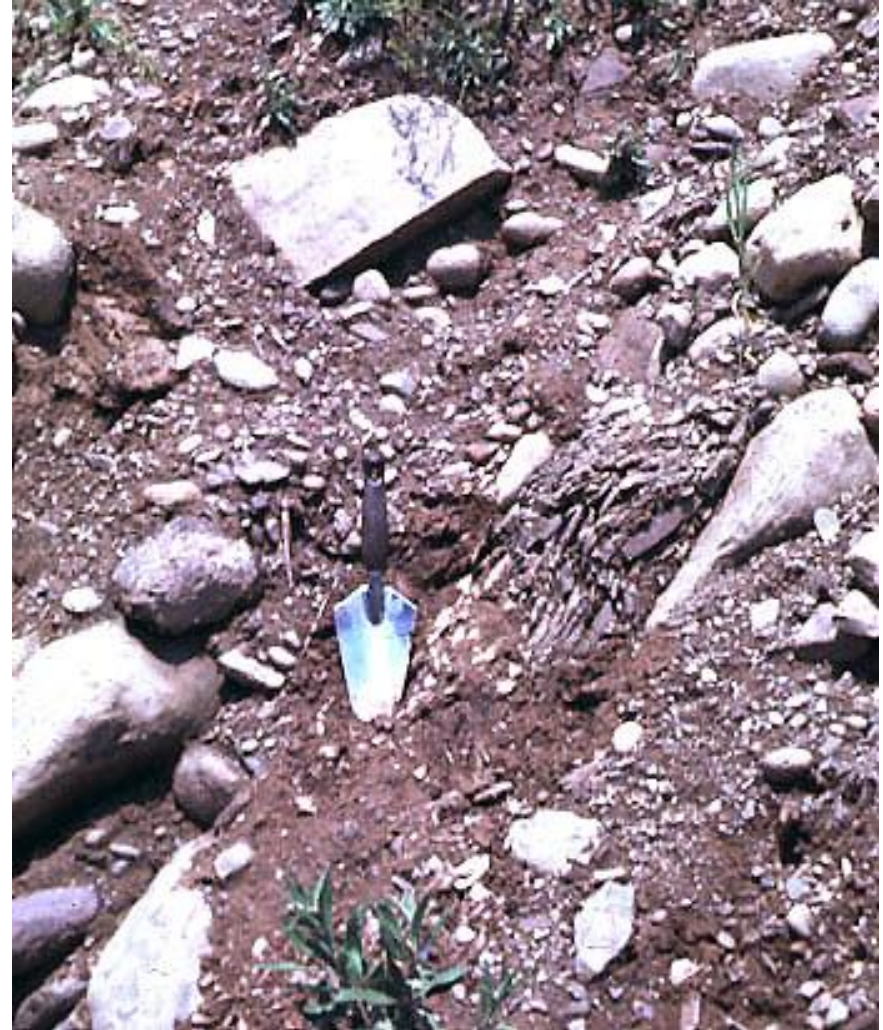
Morrenas e Tills



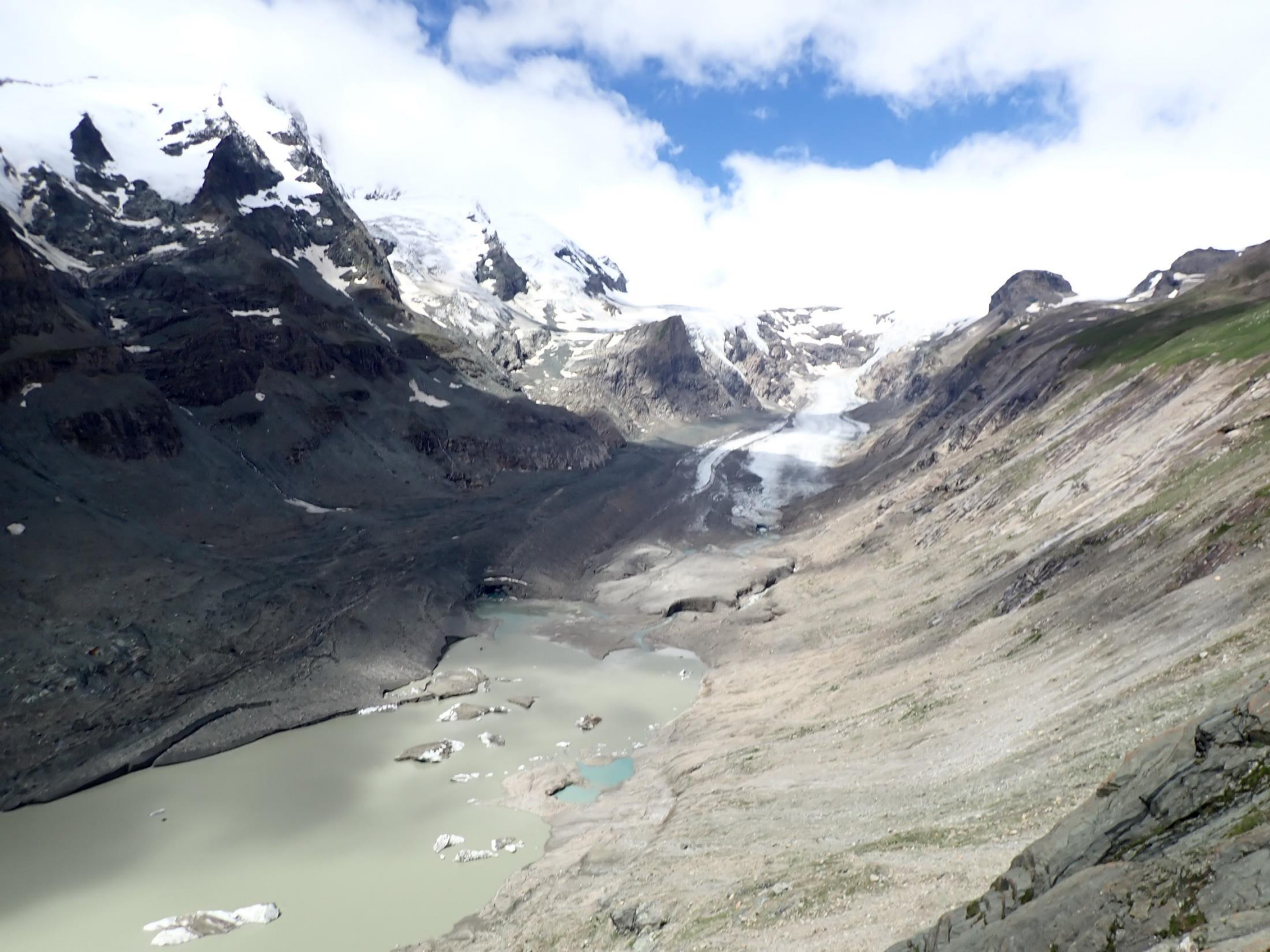
(a)
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(b)
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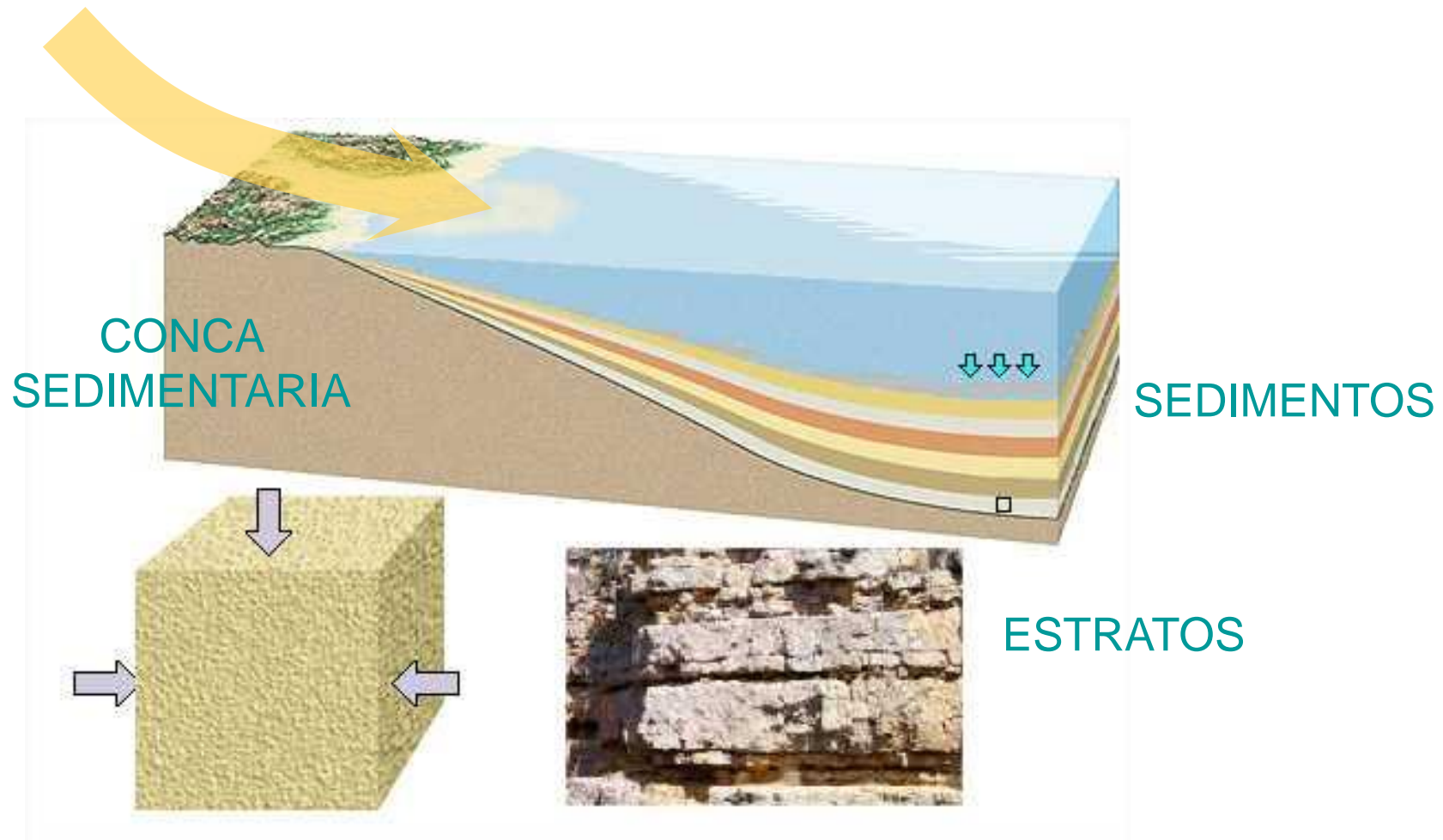








SEDIMENTACIÓN



SEDIMENTO

FRACCIÓN DETRÍTICA

Fragmentos de rochas e
materiais en estado sólido

Cantos (>2mm)

Areas (0,06 – 2 mm)

Limos (0,004 – 0,06 mm)

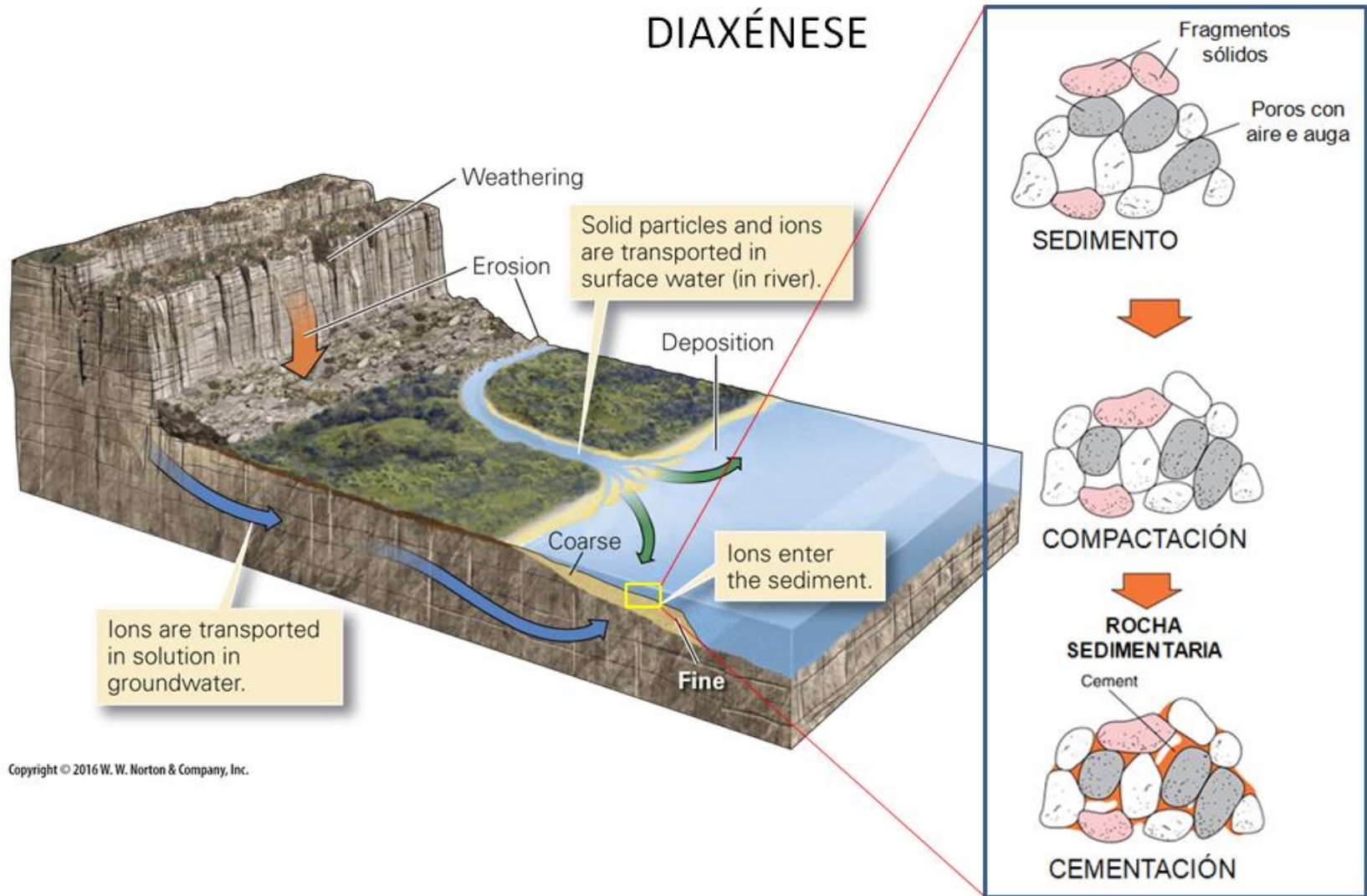
Arxilas (<0,004 mm)

FRACCIÓN PRECIPITADA

Precipitación dos materiais
transportados en disolución



DIAXÉNESE

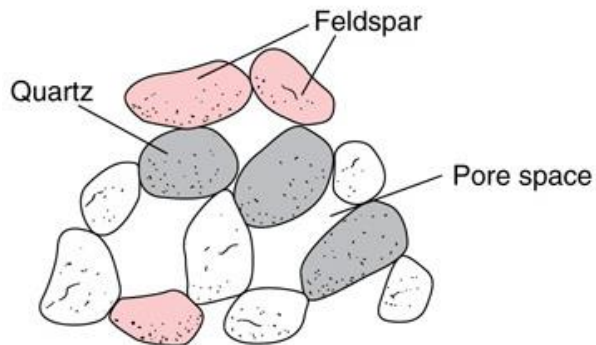


LITIFICACIÓN OU DIAXÉNESE

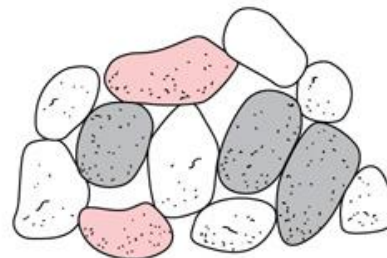


SEDIMENTO

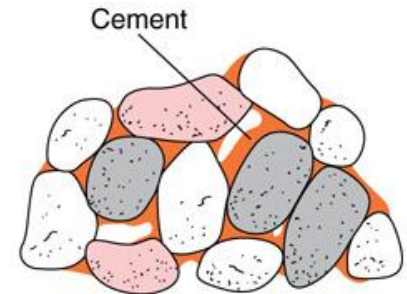
ROCHA
SEDIMENTARIA



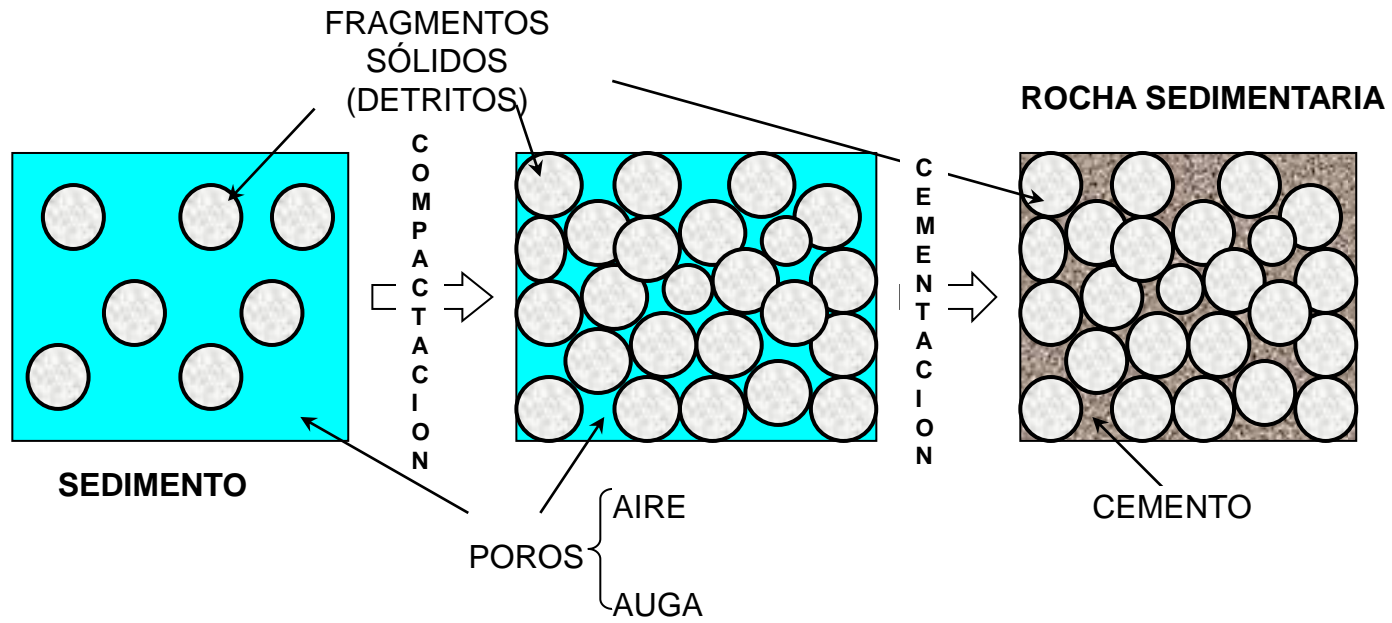
A After deposition



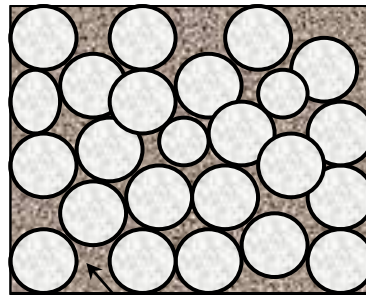
B Compaction



C Cementation



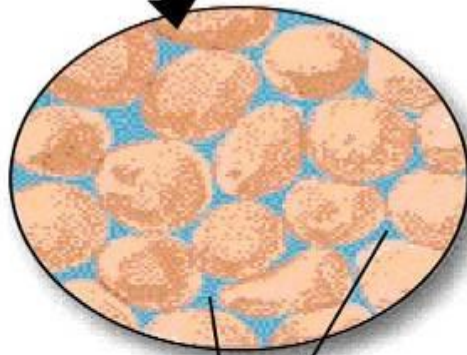
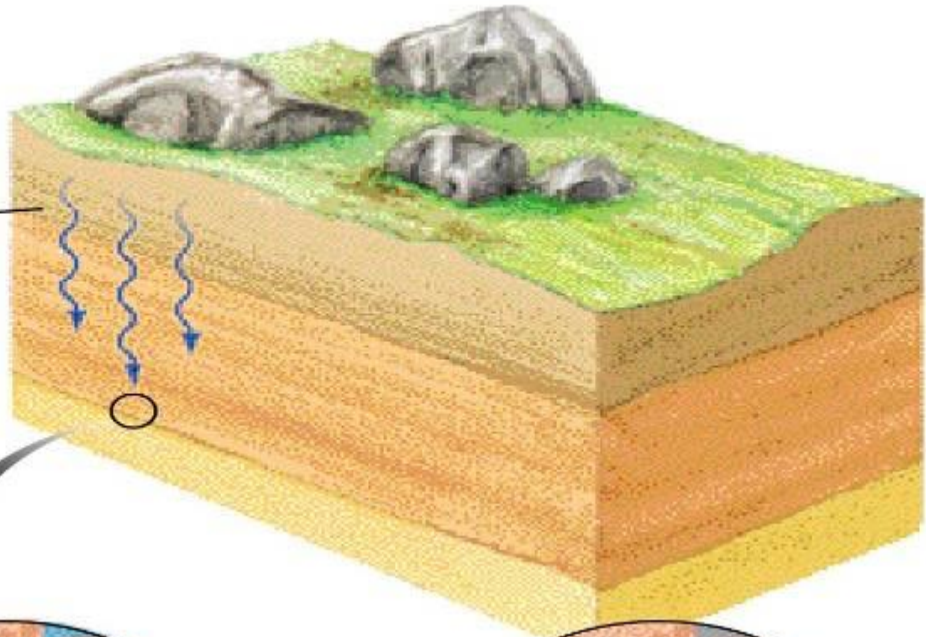
ROCHA SEDIMENTARIA



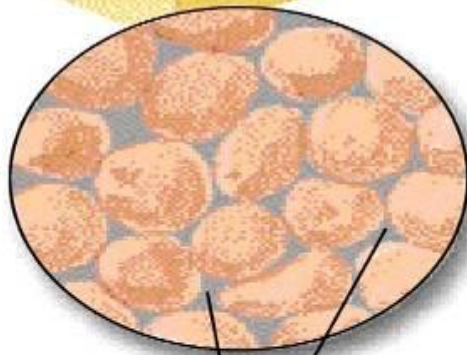
CEMENTO



1 Ions weather out of rock, are transported by groundwater to sediment layers below



2 Ion-rich water enters pore spaces between sediment grains



3 Dissolved ions precipitate to form cement between sediment grains

CEMENTO = MATERIAL DE PRECIPITACIÓN CALCITA E SÍLICE PRINCIPALMENTE

Quartz sand
grains

Calcite
cement

