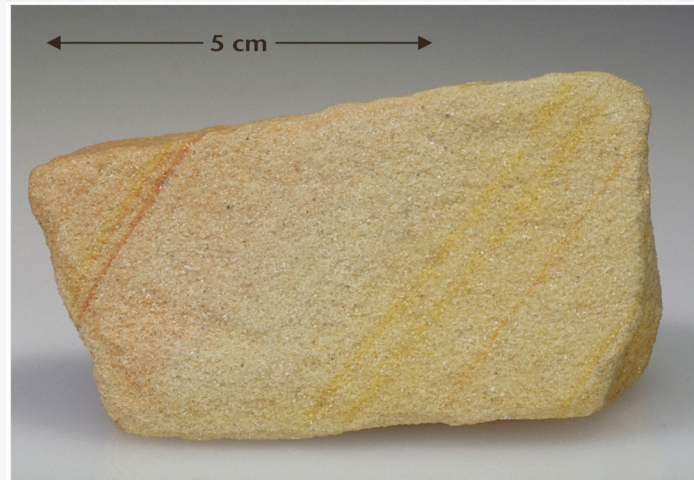


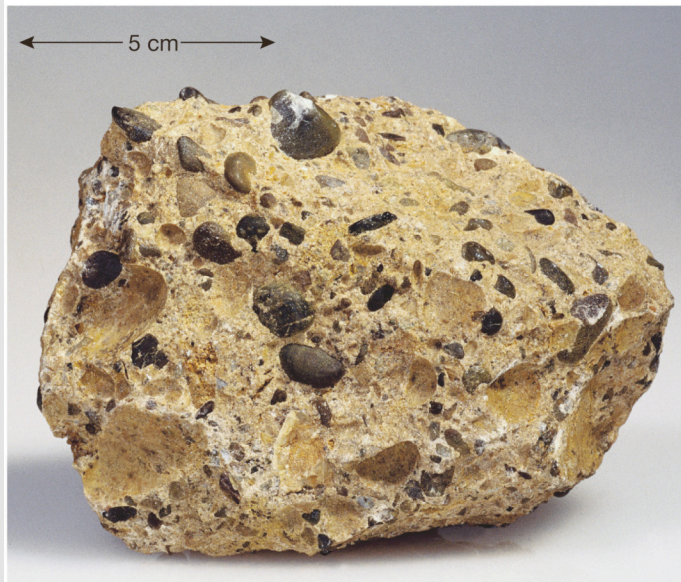
Clastic/Detrital Sed Rocks

■ **Particles/fragments cemented together**

- **Shale**
- **Sandstone**
- **Conglomerate**
- **Breccia**



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Chemical sedimentary rocks

Precipitated Rocks--Oceans



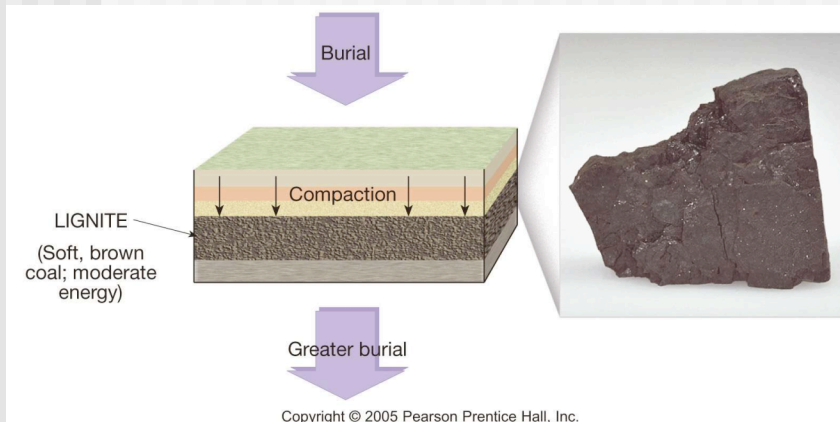
B.

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- Limestone
- Coquina
- Chert
- Chalk
- Coal



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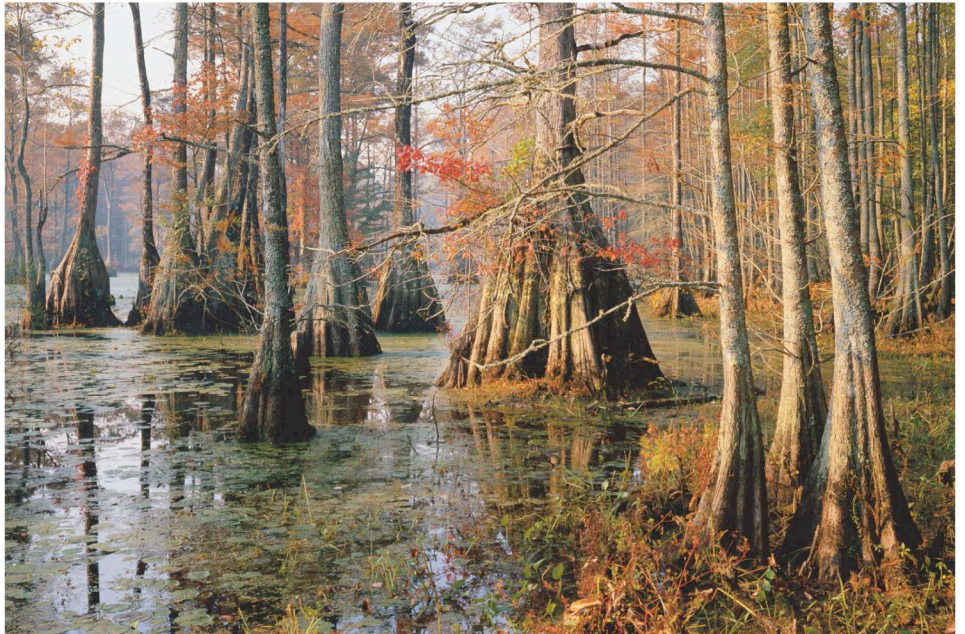


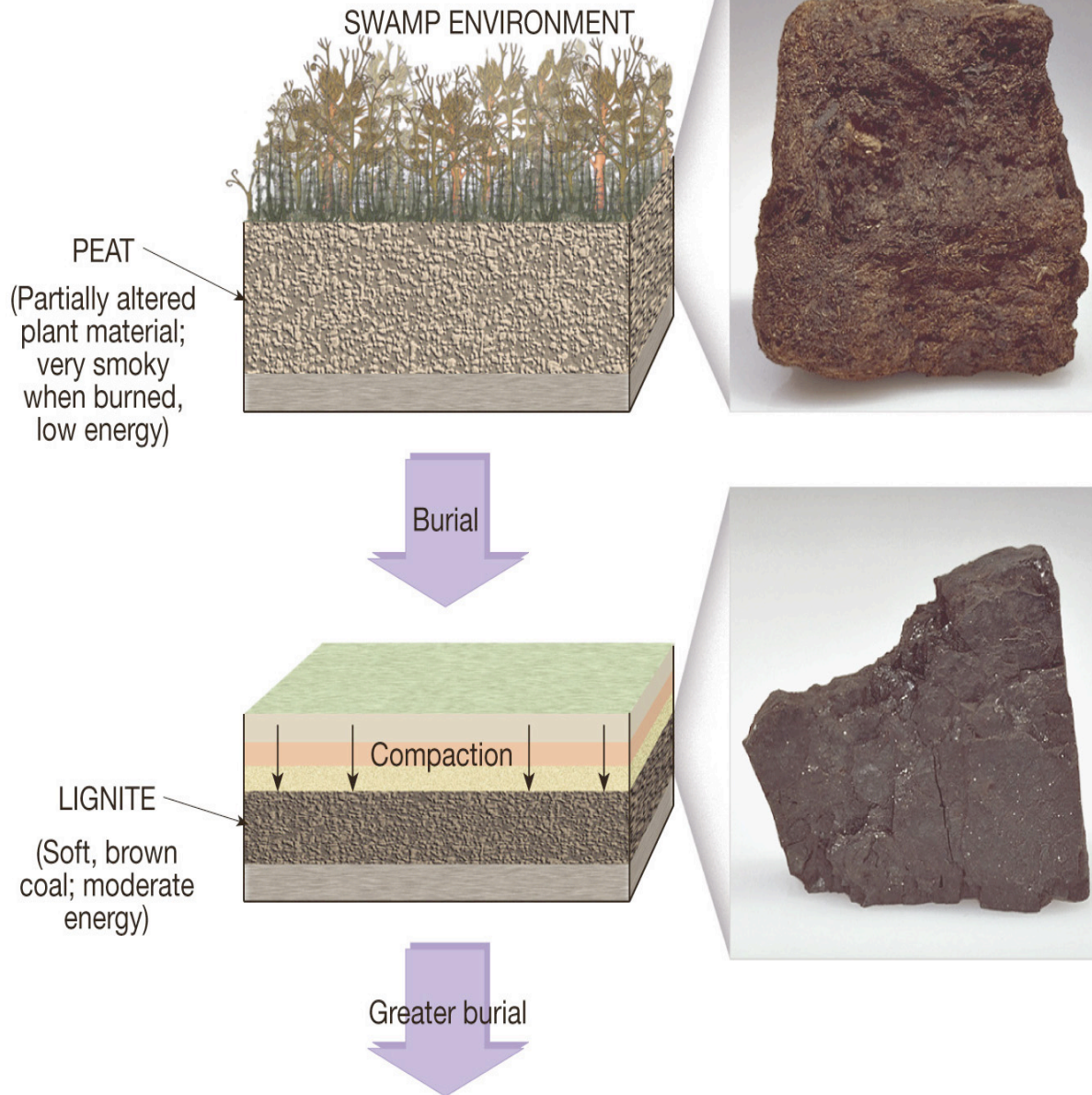
Chemical sedimentary rocks

■ **Common chemical sedimentary rocks**

- **Coal**

- **composed of organic material**
- **Stages in coal formation (in order)**
 - **1. Swamp**
 - **2. Peat**
 - **3. Lignite**
 - **4. Bituminous**
 - **5. Anthracite**

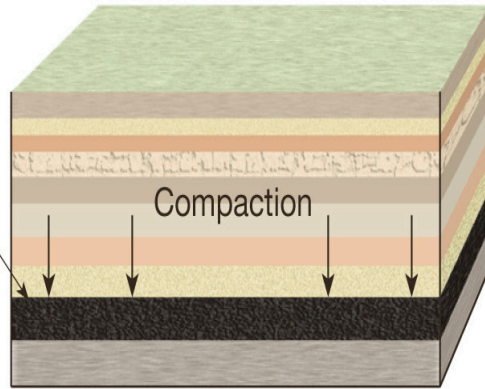




Stages of coal formation

Figure 7.15

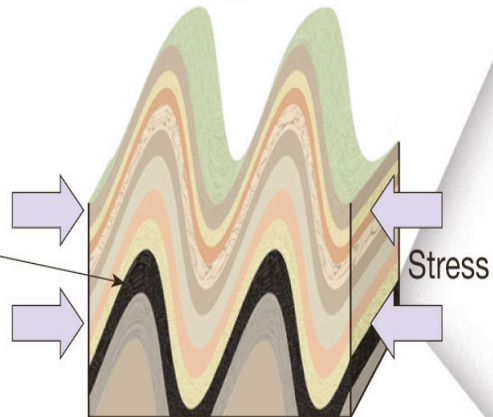
BITUMINOUS
(Soft; black coal; major coal used in power generation and industry; high energy)



METAMORPHISM



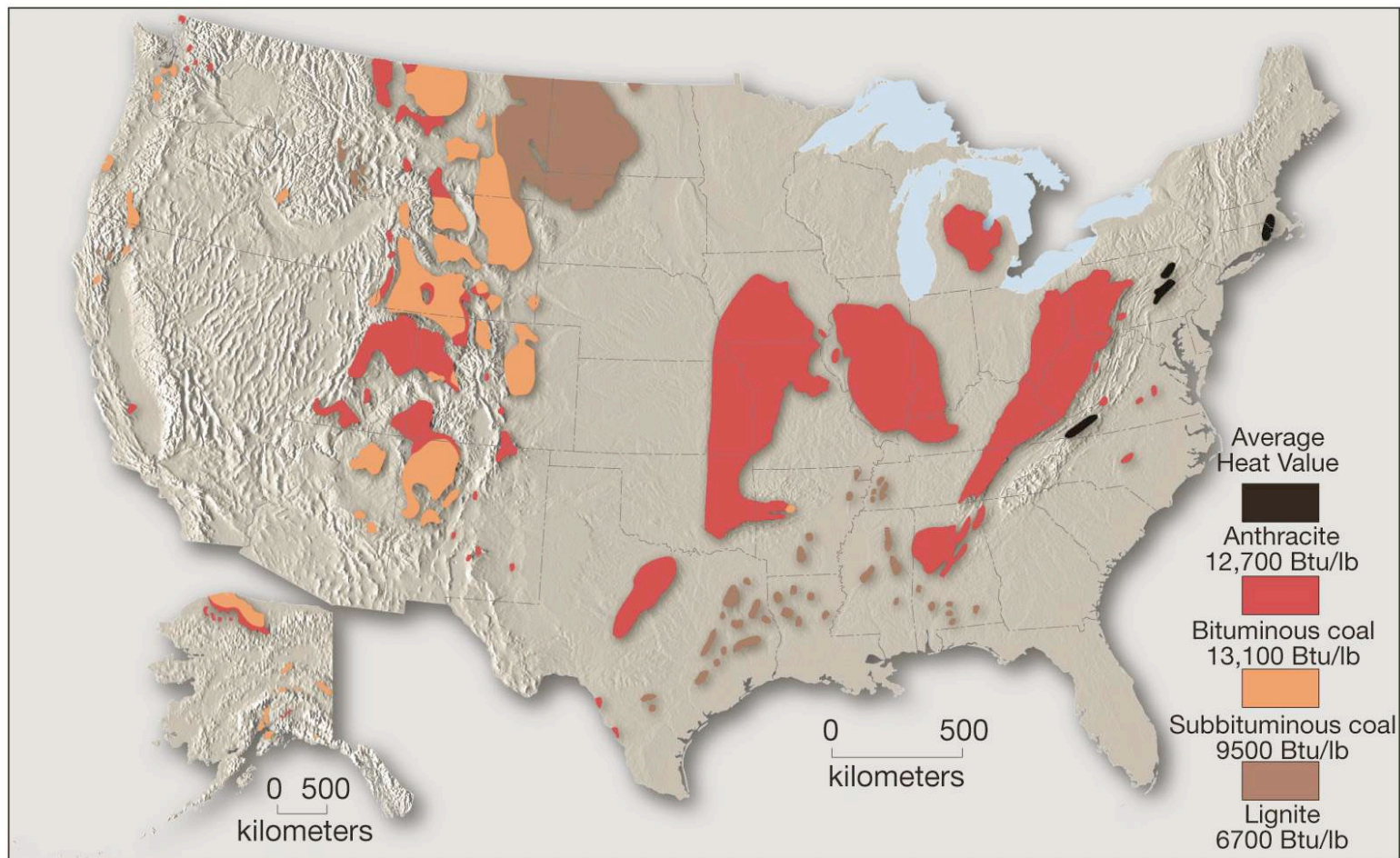
ANTHRACITE
(Hard, black coal; used in industry; high energy)



Stages of coal formation

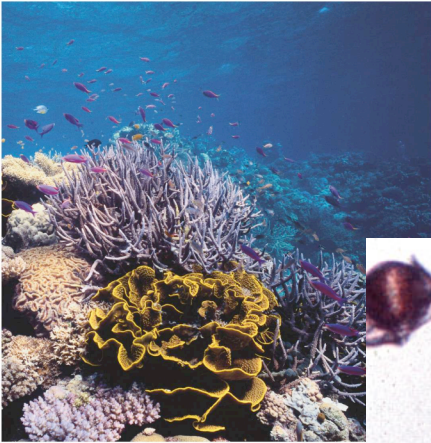
Figure 7.15

Coal in the U.S.



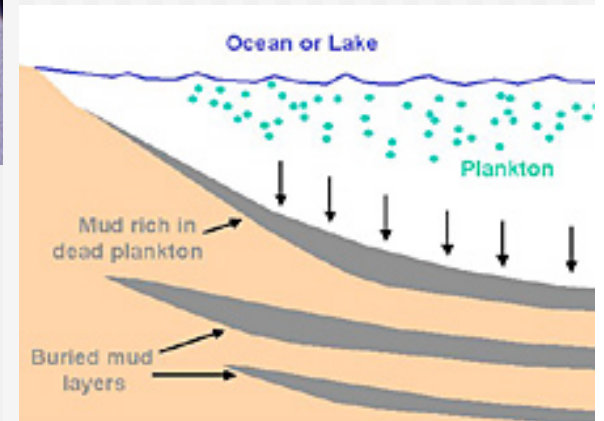
Hall, Inc.

Oil--Oceanic Plankton



A.

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Oceanic muds

Sed Features

- Graded Bedding
- Cross Beds
- Ripple Marks
- Mud Cracks

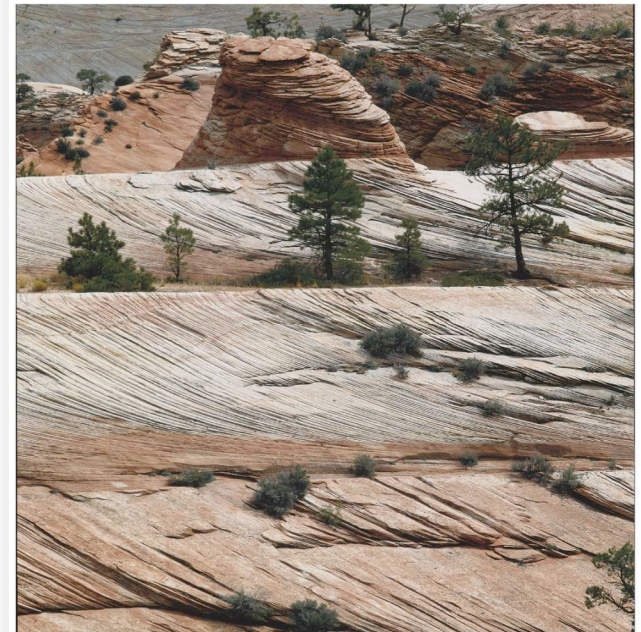


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B.

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Sedimentary environments

■ **Types of sedimentary environments**

- **Continental**
- **Shorelines**
- **Marine**



Beach

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Stream

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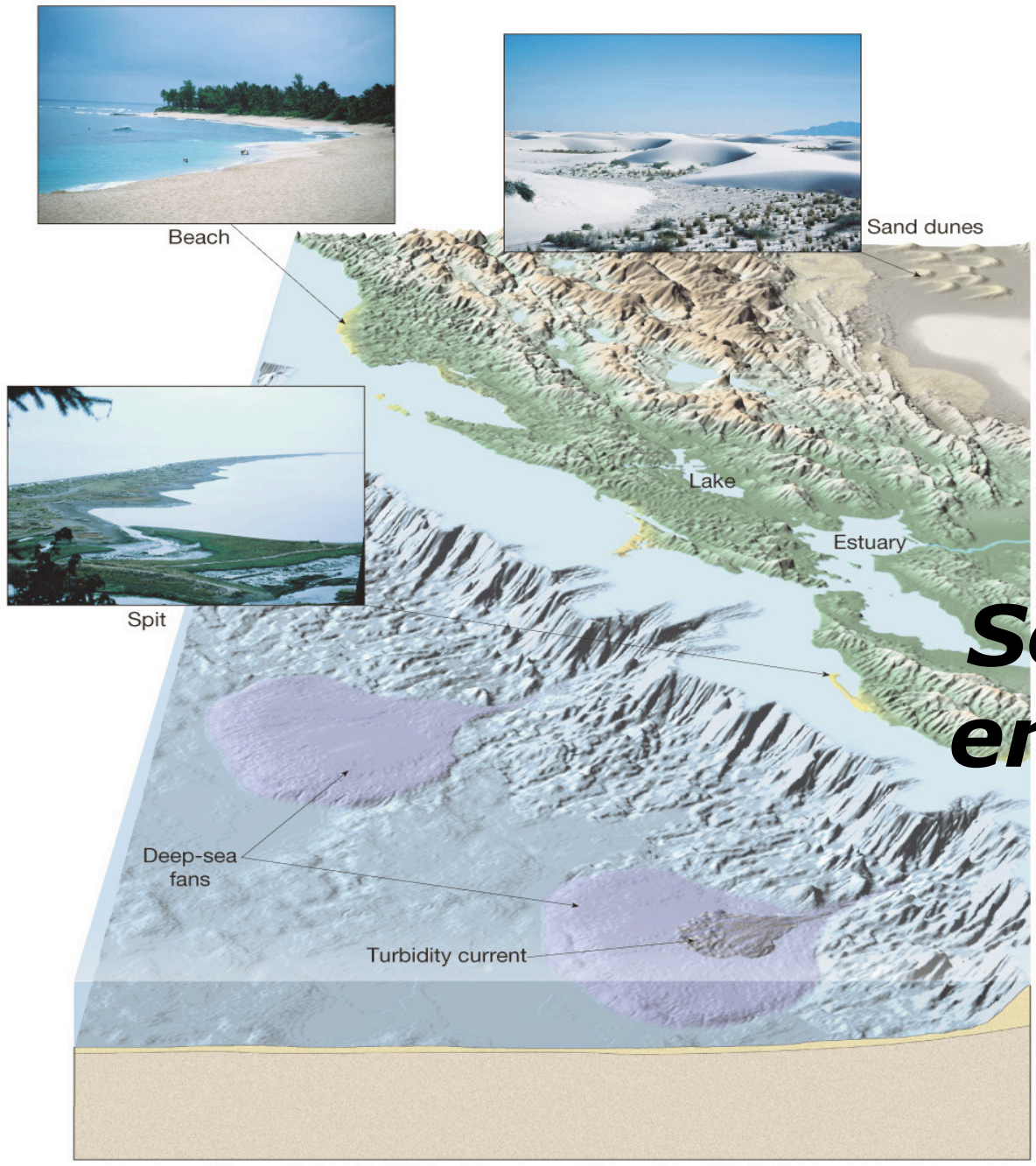
A.

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Sand dunes

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Sedimentary environments

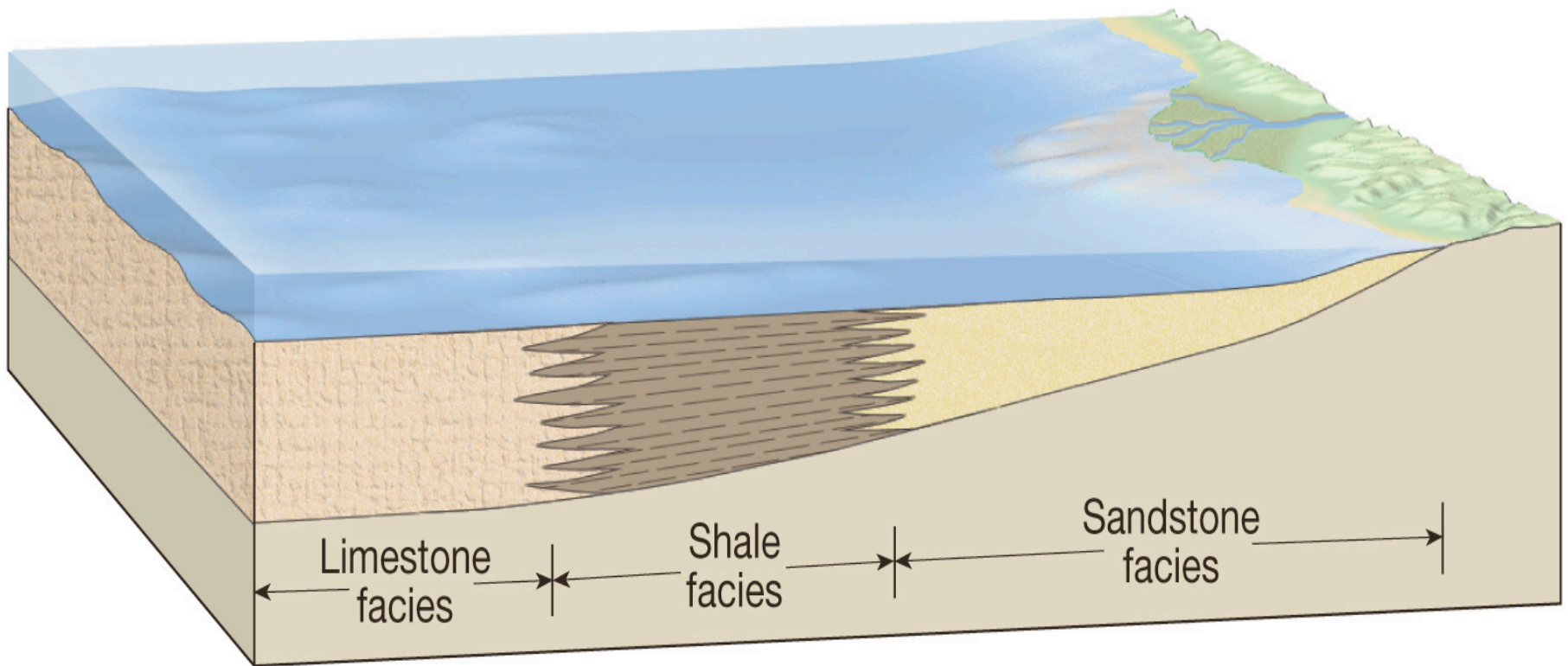
Figure 7.19 (left)



Sedimentary environments

Figure 7.19 (right)

Sedimentary facies



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Importance of Sedimentary Rocks

- ***Depositional History***
- ***Surface Processes***
- ***Fossils (animals and plants)***
- ***Transgression & Regression***
- ***Resources***
- ***Record of Time***

