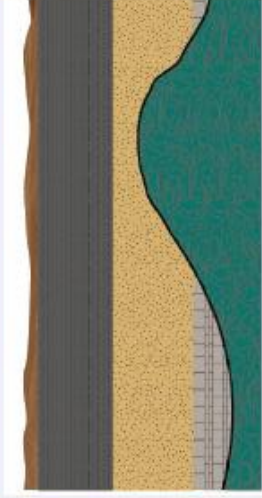
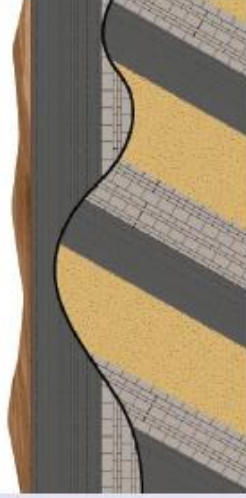
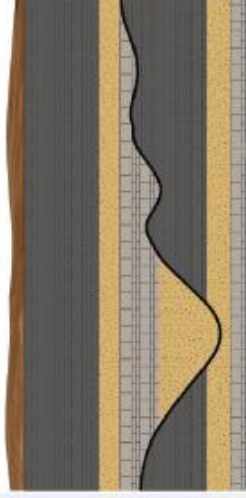


Types of Unconformities

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Types of Unconformities		Description
Type Nonconformity	Example 	Unstratified igneous or metamorphic rock may be uplifted to Earth's surface by crustal movements. Once the rock is exposed, it erodes. Sediments may then be deposited on the eroded surface. The boundary between the new sedimentary rock and the igneous or metamorphic rock is a <i>nonconformity</i> . The boundary represents an unknown period of time during which the older rock was eroded.
Angular unconformity		An <i>angular unconformity</i> forms when rock deposited in horizontal layers is folded or tilted and then eroded. When erosion stops, a new horizontal layer is deposited on top of a tilted layer. When the bedding planes of the older rock layers are not parallel to those of the younger rock layers deposited above them, an angular unconformity results.
Disconformity		Sometimes, layers of sediments are uplifted without folding or tilting and are eroded. Eventually, the area subsides and deposition resumes. The layers on either side of the boundary are nearly horizontal. Although the rock layers look as if they were deposited continuously, a large time gap exists where the upper and lower layers meet. This gap is known as a <i>disconformity</i> .

Transparency Worksheet

Types of Unconformities

1. How do nonconformities differ from angular conformities and disconformities?

2. Why do unconformities represent a break in the geologic record?

3. In a nonconformity, what types of rock underlie the sedimentary rock?

4. Which type of unconformity do you think is the most difficult to detect? Explain your answer.

5. The geologic processes of uplifting and folding would most likely precede which type of unconformity?
