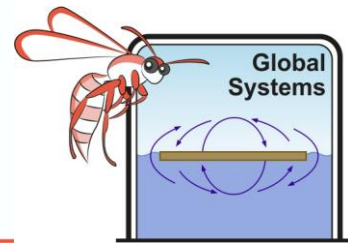


Lithification - Teacher Notes



Lithification

The process of lithification turns loosely compacted and poorly cemented sediments into rock. Most of Earth's carbon is bound up in rocks, sediments and soils. They can be very long lasting sinks. If the rocks contain high amounts of fossilised material they can become fossil fuel reservoirs. We burn North West Shelf oil and gas from rock to create power for industry and domestic use.

Students will need access to reference books or the Internet to answer these questions.

1. Approximately how long has carbon from our North West oil and gas fields been stored in the rocks before it is released into the atmosphere by combustion?
[About 130million years – Lower Cretaceous](#)
2. We burn Perth Basin gas for domestic use. Approximately how long has its carbon been stored in the rocks before it is released into the atmosphere by combustion?
[About 270 million years \(Mostly Jurassic but some Cretaceous near Gingin\)](#)
3. We we burn Collie coal for electricity production. Approximately how long has its carbon been stored in the rocks before it is released into the atmosphere by combustion?
[About 280 million years \(Permian\)](#)