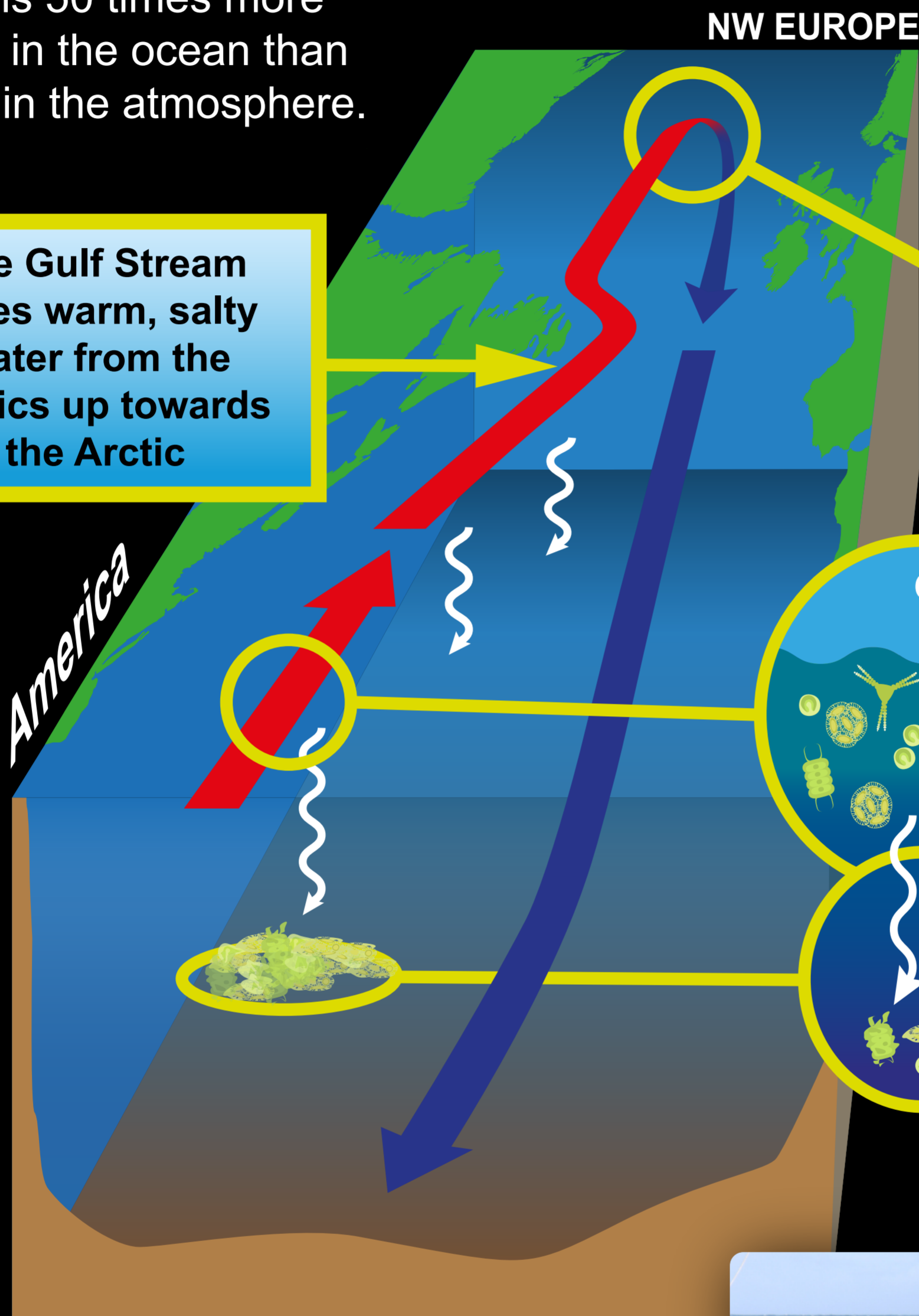


The Ocean in the Carbon Cycle

The ocean stores carbon: there is 50 times more carbon in the ocean than there is in the atmosphere.

The Gulf Stream takes warm, salty water from the tropics up towards the Arctic



Heat
CO₂ CO₂

Cold water absorbs more CO₂ from the atmosphere. Cold water is denser so it sinks, taking the CO₂ with it.

Microscopic plants grow in the surface ocean, removing CO₂ from the atmosphere.

These plants then sink to great depths, taking the CO₂ with them.

Dissolved CO₂ and organic carbon are stored in the deep ocean. Wind and tides eventually return it to the sea surface over 100's - 1000 years.

Water samples are collected from the deepest parts of the ocean to see where the carbon is being stored.

