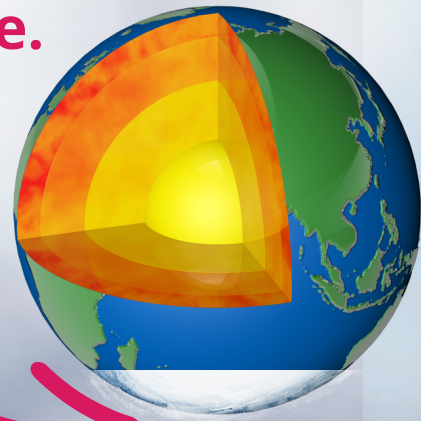


The Importance of Sea Ice

Sea Ice is simply frozen ocean water. It forms, grows, and melts in the ocean. Extensive sea ice occurs in both the **Arctic** and **Antarctic**.

Sea ice is part of the Earth's **cryosphere**.

(The Cryosphere is the Earth's surface where water is in solid form, including sea ice, lake ice, river ice, snow cover, glaciers, ice caps, ice sheets, and frozen ground.)



Some sea ice is **fixed** while some floats **free**.

Floating sea ice can become deformed to creates **rafts, ridges** and **hummocks**.



Hummocks



Rafts



Ridges

Cracks in the sea ice are very important for animals and people.

They are important for wildlife and for navigation.

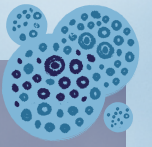


Sea ice covers about 7% of the Earth's surface and about 12% of the world's oceans.

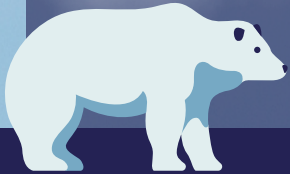
Sea Ice has some distinct properties

It is easier to squash, break and snap sea-ice and harder for light to shine through than fresh water ice.

The salt of sea ice decreases over time, this is called **salinity**.

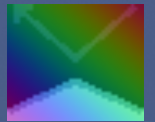


Sea ice has a profound effect on **life** in the Arctic.



Sea ice has significant effects on the **ocean, atmosphere,** and **climate**.

Sea ice **insulates** the oceans of The Arctic.



Sea ice has a major **cooling effect** on the global climate through reflecting the sun.



Sea ice helps create the **world's ocean currents**.



Sea ice effects the **atmosphere** above it and hundreds of kilometers away.



Sea ice reduces **water evaporation** which reduces **rain** in The Arctic.



Scientists often **measure** sea ice from space using **satellites**.

