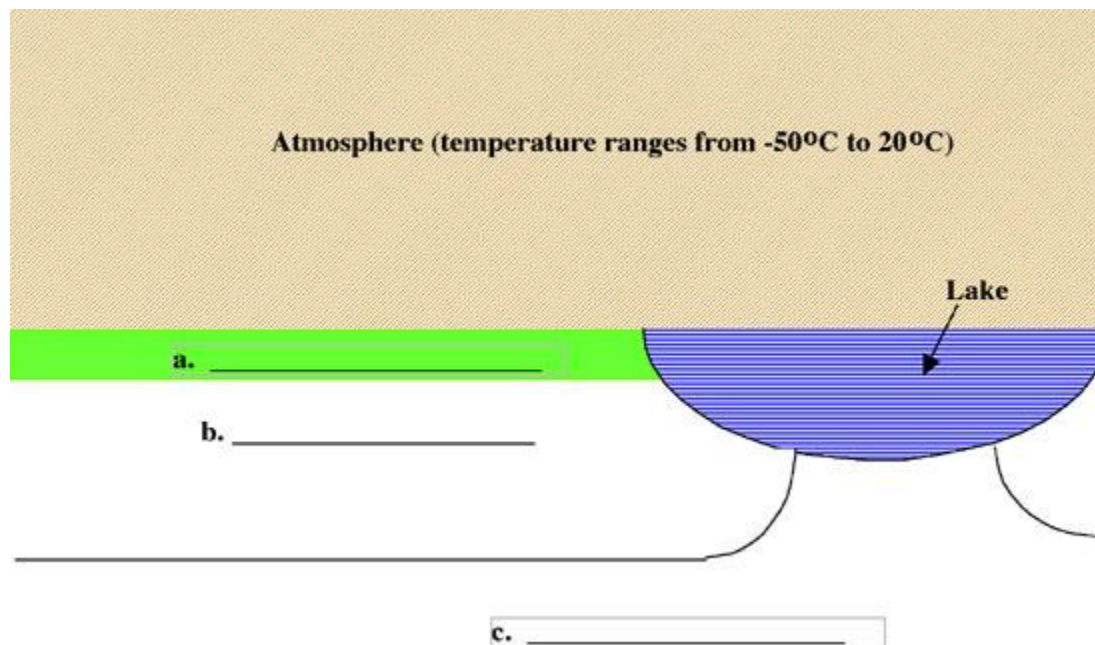


On Thin Ice: *Ice Bear: Permafrost and Icehouses*

Background: Permafrost

Permafrost is a term that refers to permanently frozen ground. Permafrost exists across the arctic because of the cold temperatures. The depth of permafrost can be as much as 600 m deep in the high arctic. The permafrost in the arctic is called 'continuous' since it exists in all locations under the tundra except for under deep lakes. Permafrost exists in the sub-arctic but it is discontinuous and does not occur in all areas.

Label the diagram below using the terms: permafrost, active layer, and talik



Climate change threatens the stability of the permafrost. The warming air temperature is resulting in the active layer getting thicker. Consequences of increased melting include land slides and instability of riverbanks, roads, runways, and footings of buildings.