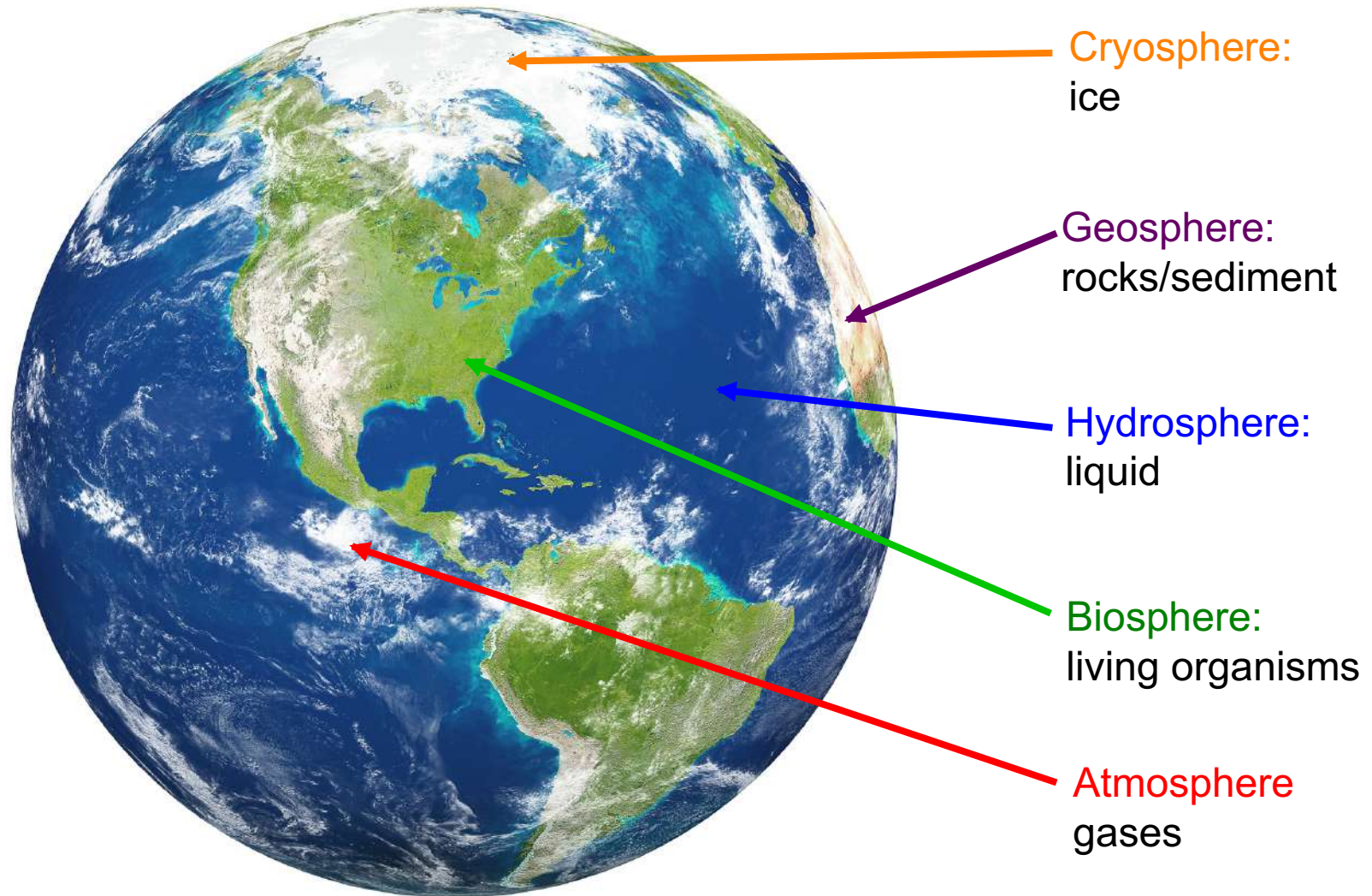


How the Earth System is Connected

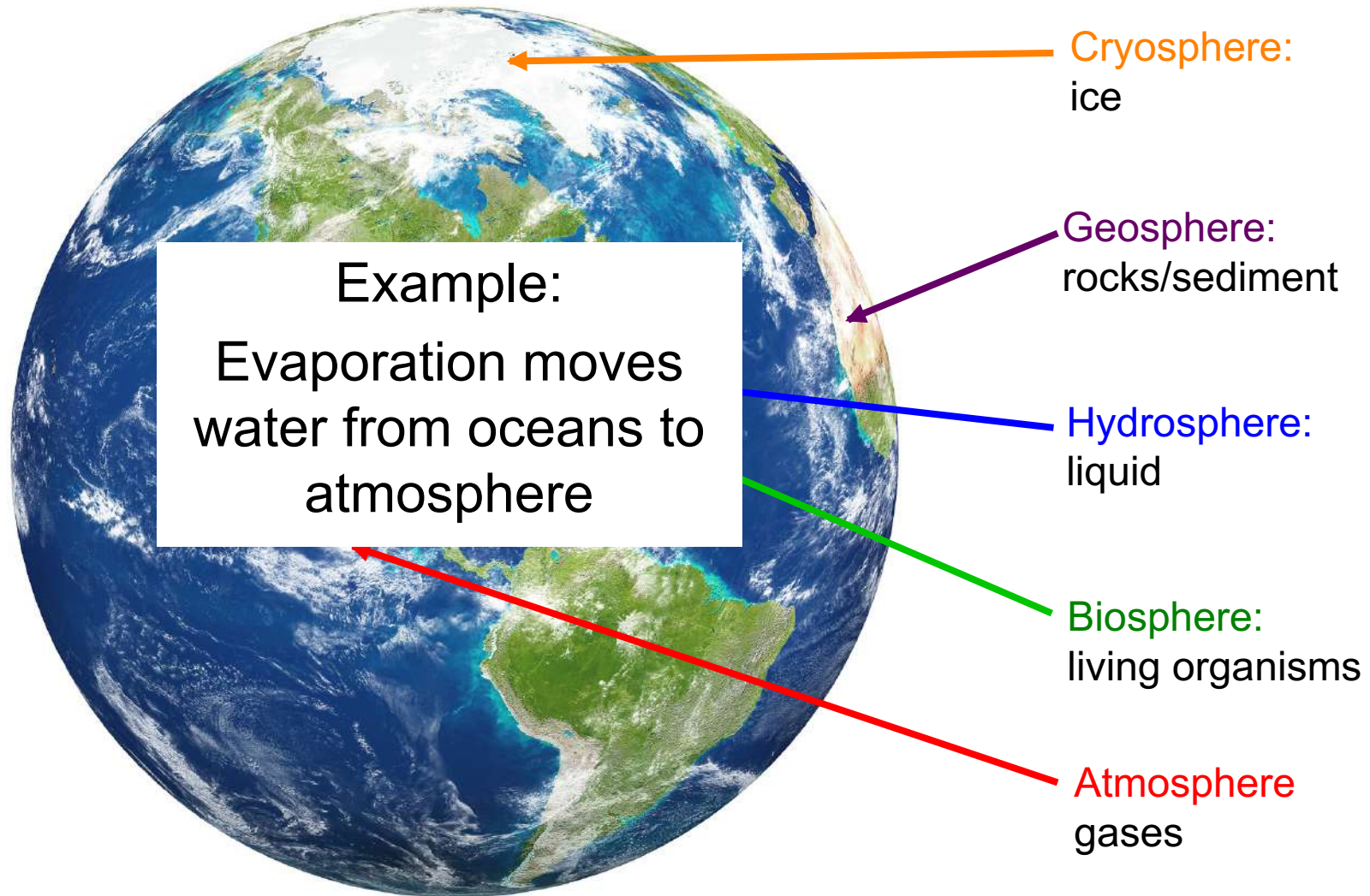
The Earth System

Reservoirs or spheres – realms of matter that reside on Earth



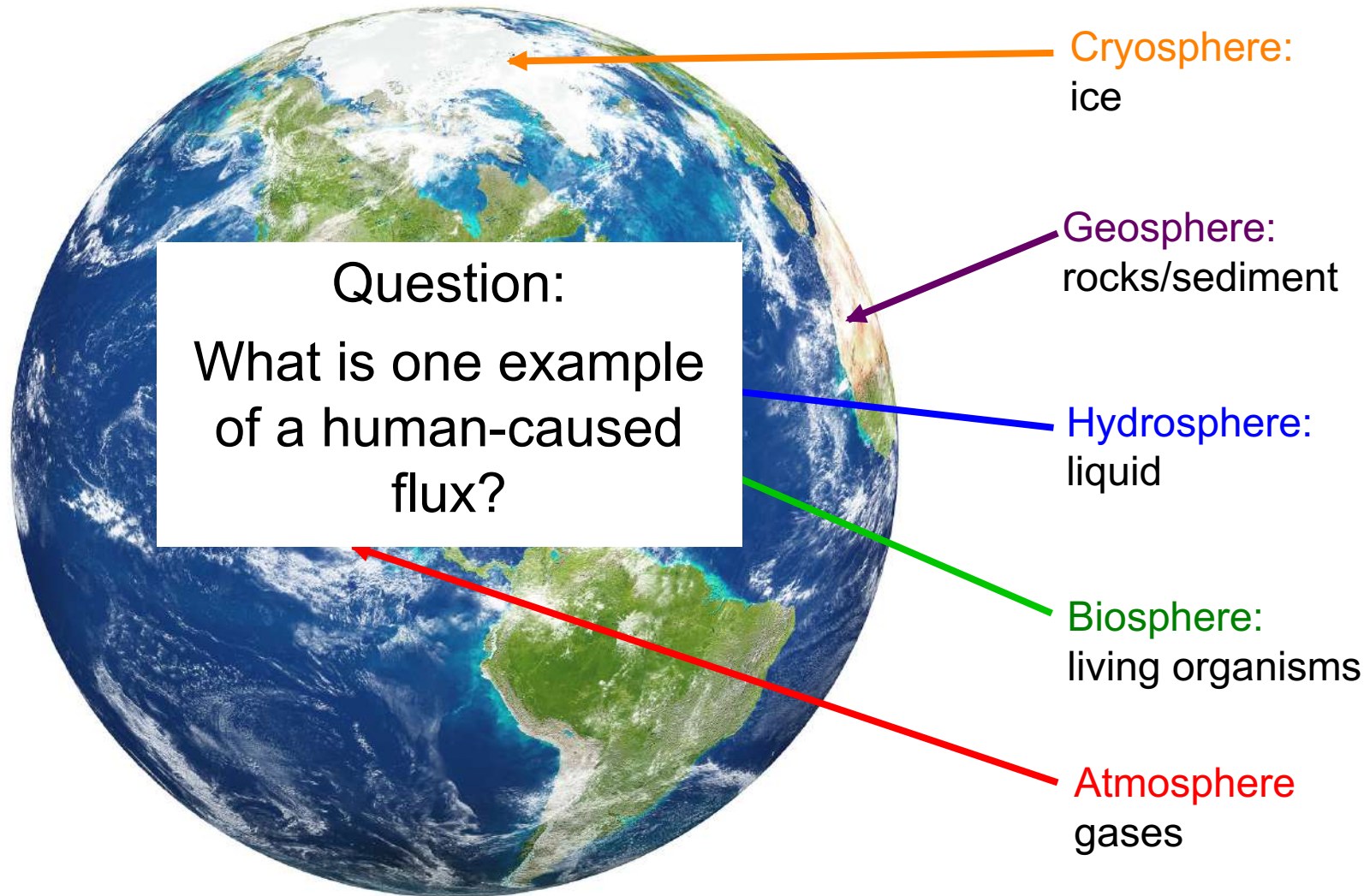
The Earth System

Flux – process that moves matter from one reservoir to another



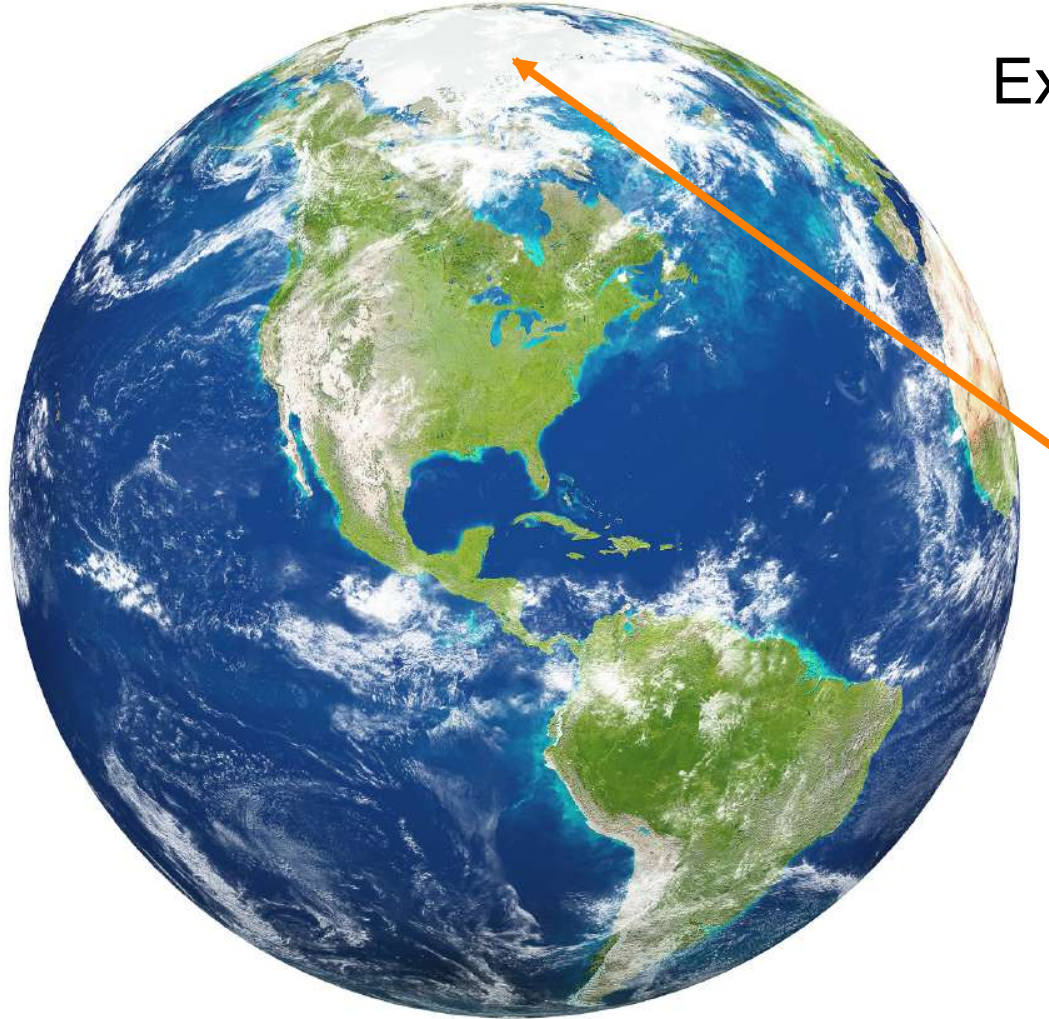
The Earth System

Flux – process that moves matter from one reservoir to another



The Earth System

Feedback loop – change in one aspect of a system will eventually modify what was originally changed.



Example:

Initial change: Earth's temperature increases

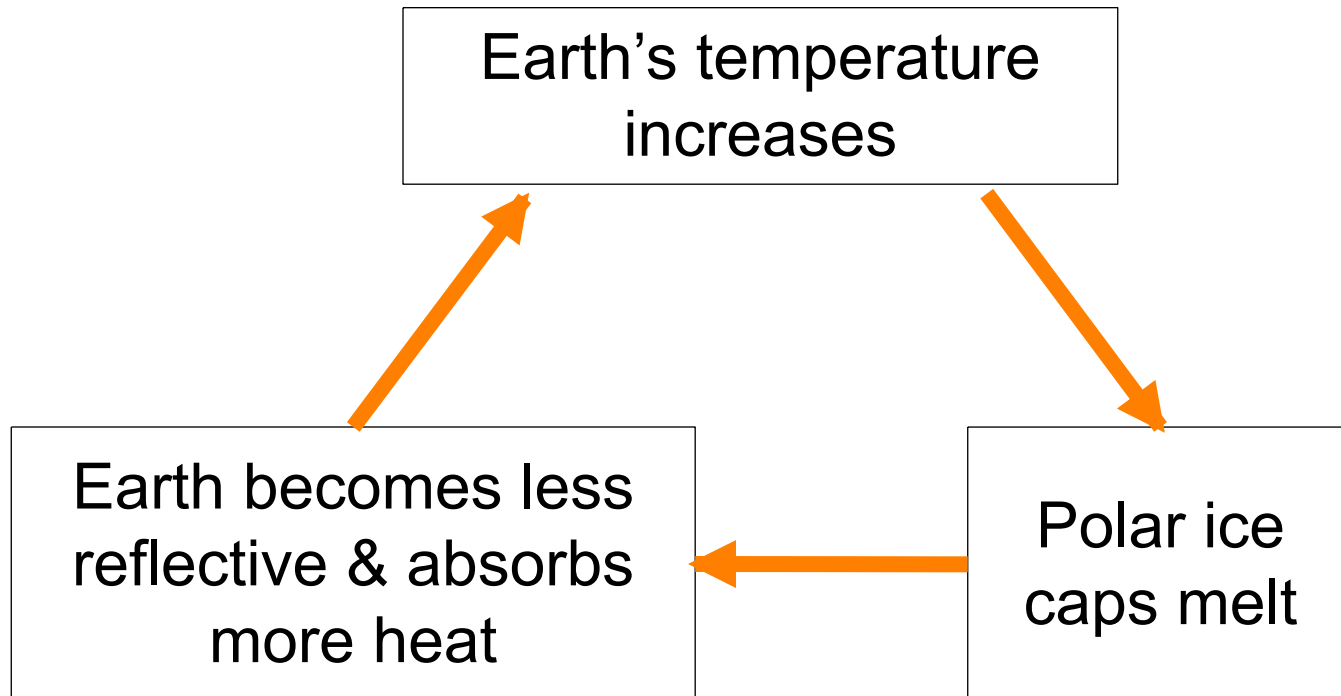
Secondary change: Polar ice caps melt

Tertiary change: Earth becomes less reflective and absorbs more heat

The Earth System

Feedback loop – change in one aspect of a system will eventually modify what was originally changed.

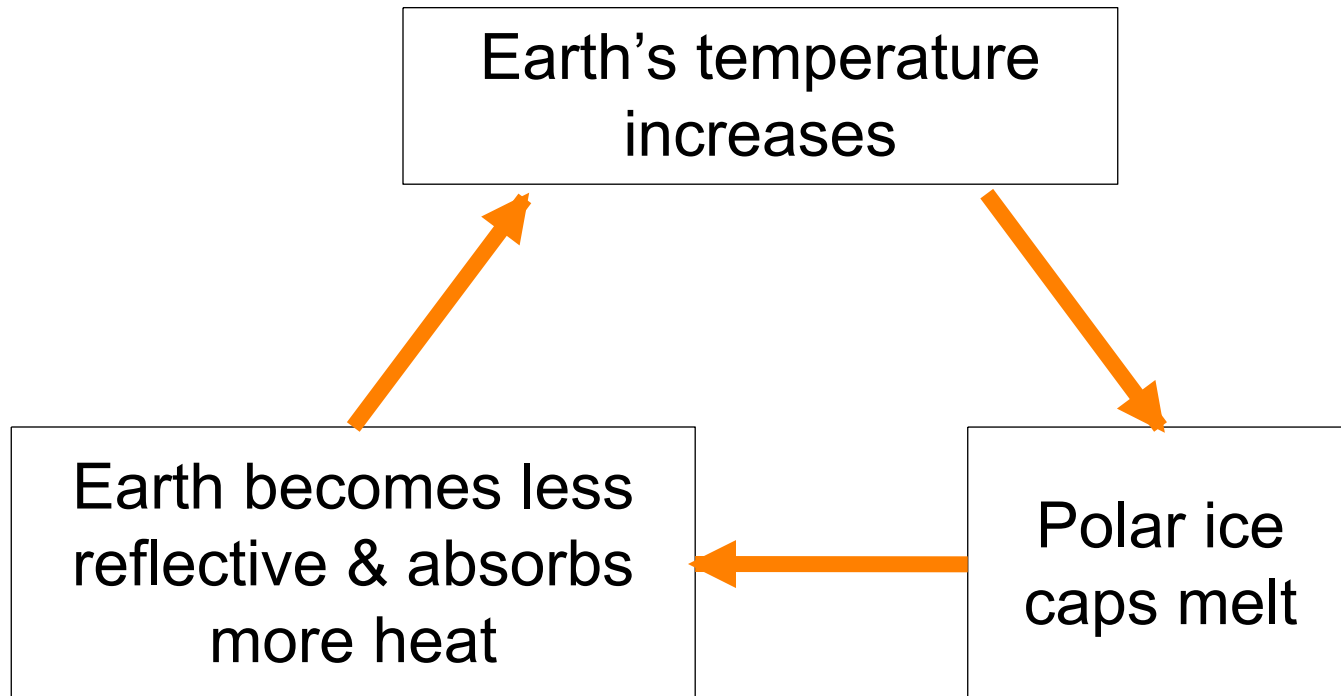
Another way to look at it as a true “loop”:



The Earth System

This is a “positive feedback loop”...

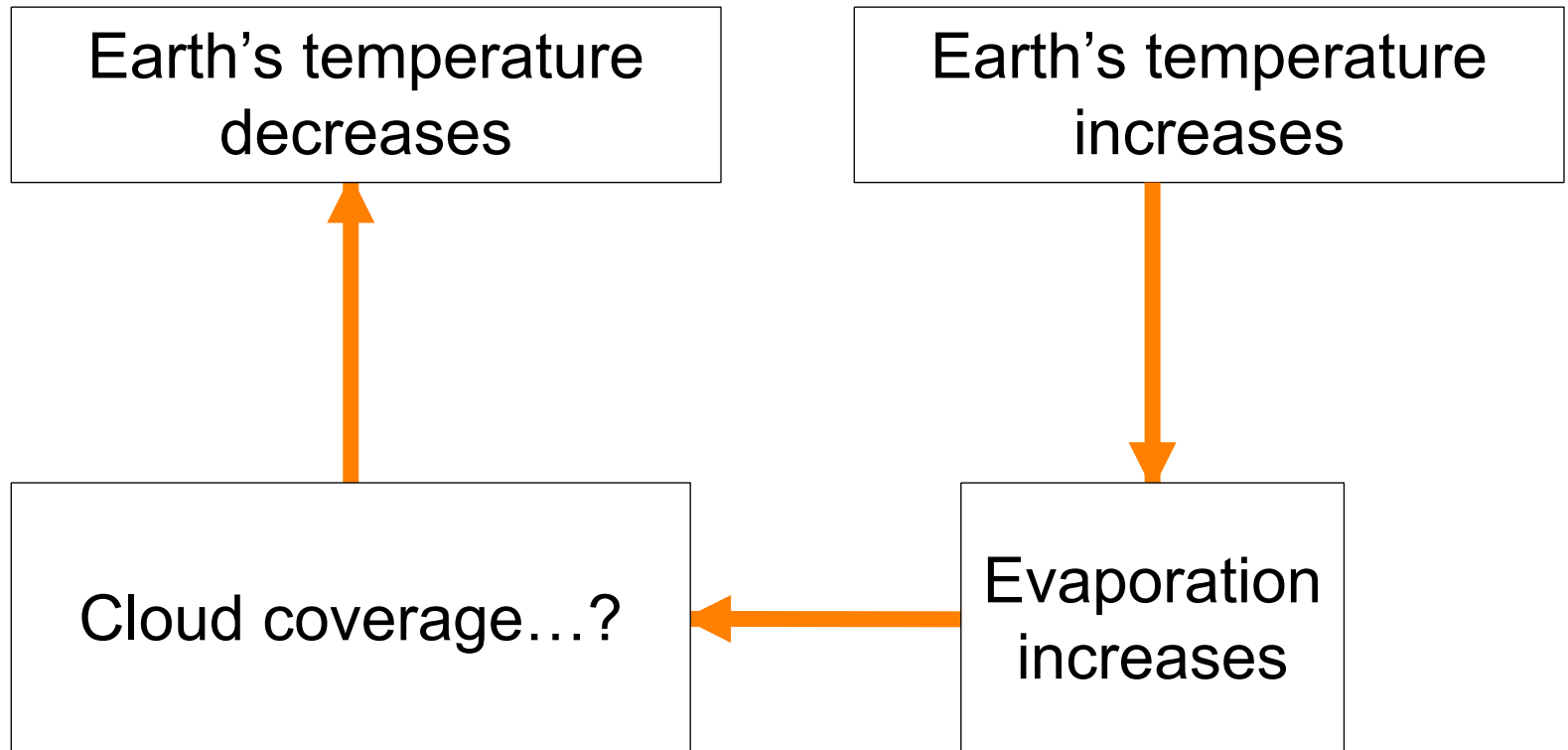
meaning initial change is enhanced or increase in temperature eventually enhances (increases) temperature.



The Earth System

Negative feedback loops work like thermostats.

Can you complete this negative feedback loop?



The Earth System

Initial temperature increase results in temperature decrease via cloud coverage.

