

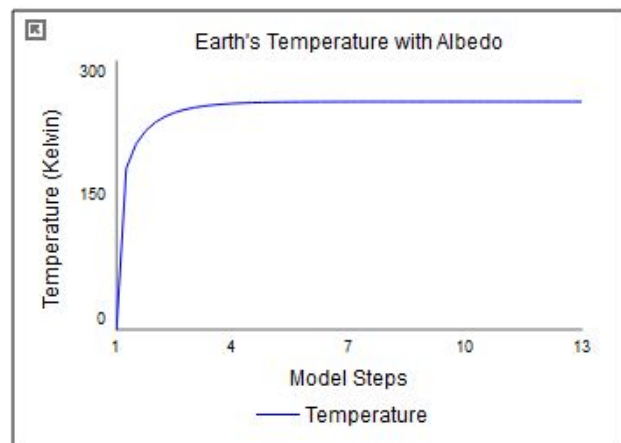
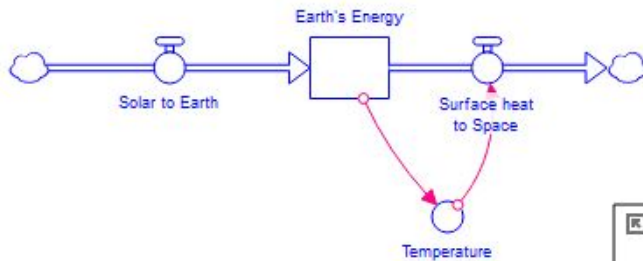
1. Create a table with the column headings “stocks” and “flows.” Place each of the following in the appropriate column: the sun, outer space, reflection back to outer space, Earth’s atmosphere, atmospheric scattering, solar radiation, Earth’s Surface, Reflection from earth’s surface back to atmosphere (2 pts).

Stocks	Flows
<i>The Sun</i>	<i>Reflection back to outer space</i>
<i>Outer Space</i>	<i>Atmospheric Scattering</i>
<i>Earth’s Atmosphere</i>	<i>Solar Radiation</i>
<i>Earth’s Surface</i>	<i>Reflection from Earth’s surface back to atmosphere</i>

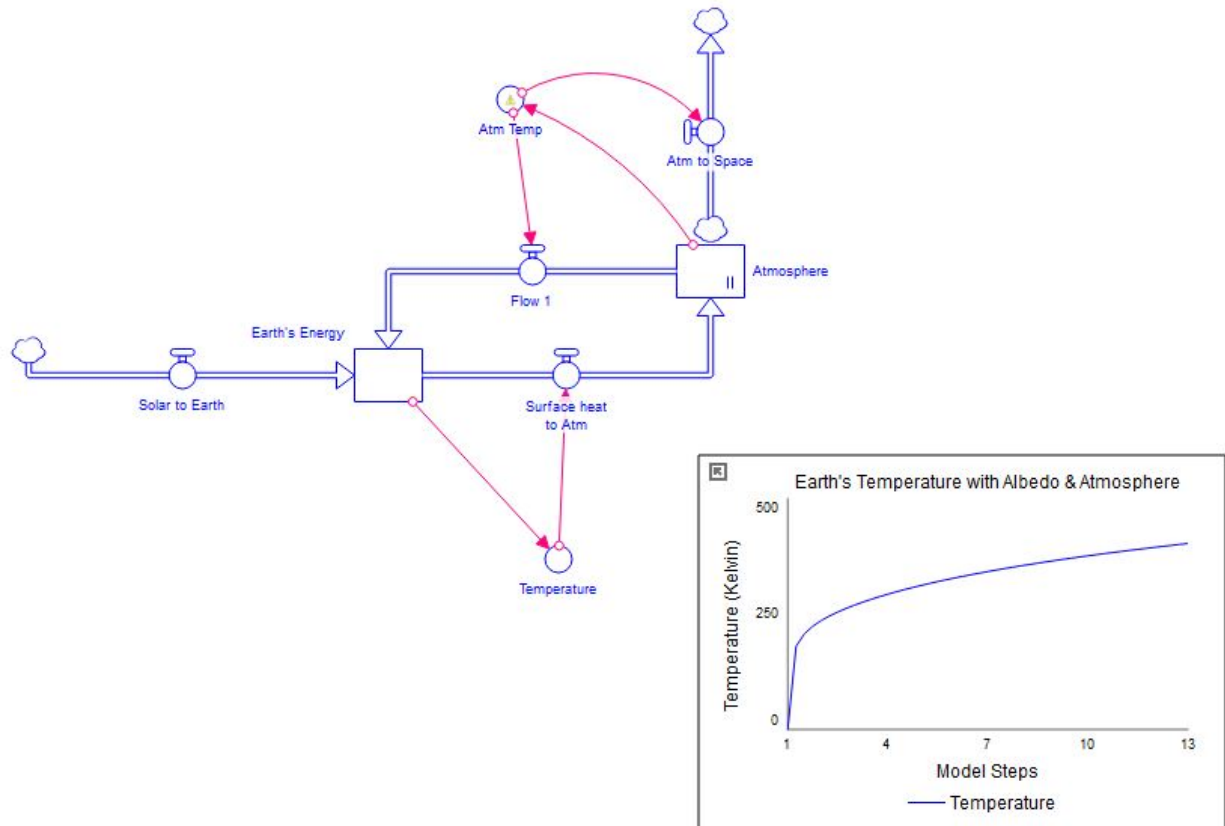
2. Earth’s albedo impacts the amount of solar radiation being absorbed by the Earth. Which three terms above are dependent on albedo. Explain (2 pts).

Earth’s surface, Earth’s atmosphere, Atmospheric scattering.

5. Take a screen shot of your schematic model and graph and paste it to a word document. Please be sure that your screenshot includes your model; 2) the temperature reading; 3) the graph of temperature over time. (3 pts)



8. Run the model. Once you have completed the model, add a graph in your workspace. Add correct titles to the graph, X axis, and Y axis. You should see that Earth's equilibrium temperature has increased due to the feedback loop created by the addition of the Atmosphere layer. Take a screen shot showing 1)The model diagram; 2) The temperature reading; 3)The graph. Paste the screen shot into a word document (3 pts).



10. Describe the changes in Earth's temperature from the perfect black body model, to the albedo model, to the model with an atmosphere (3 pts).

In the Albedo model the Earth was able to reflect some of the heat, but with the Albedo & Atmosphere model some of that reflected heat was trapped by the atmosphere and stayed in the atmosphere and the Earth warmed up much more.

11. In step 5 you added Earth's albedo to the model. How would you expect surface temperature to respond if you had changed Earth's planetary albedo to 10% instead of 30%? (2 pts).

It would've heated up much higher and faster.

12. Please submit your word document via ICON.

Submitted.