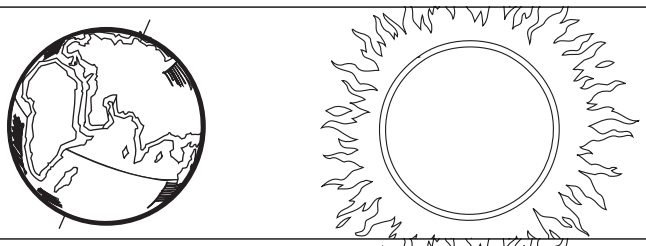
Name _____

Guided Notes–Seasons

1. Earth _revolves_ around the _sun_ in a path that _repeats_ itself every _year_.
2. This path is called an _orbit_.
3. Earth's _axis_ is not straight _up_ and _down_ but _tilted_ at an angle of _23.5°_.
4. The _North Star_ is almost directly above the _North_ Pole. Because of this the _North Star_ always stays in the _same place_ in the sky. _All_ the other _stars_ seem to revolve around the _North Star_.
5. This means that Earth's _axis of rotation_ always points in the _same direction_ while it revolves around the sun.
6. Because of this the _northern_ hemisphere is tilted towards the sun around the _21st of June_. The _southern_ hemisphere is tilted towards the sun about the _21st of December_.
7. When the Northern hemisphere has _summer_ the southern hemisphere has _winter_. When the northern hemisphere has _spring_ the southern hemisphere has _fall_.
8. When the northern hemisphere is tilted _away_ from the sun in _December_, the _sun_ appears _low_ in the sky. The angle of the _sunlight_ hitting Earth is _low_. This means that the northern hemisphere receives _little energy_ from the sun.
9. When the northern hemisphere is tilted _toward_ the sun in _June_, the _sun_ appears _high_ in the sky. The angle of the _sunlight_ hitting Earth is _high_. This means that the northern hemisphere receives _more energy_ from the sun.
10. In summer the sun is _high overhead_ and the _days_ are _longer_. This gives the sun plenty of time to _heat_ Earth.
11. In the winter the sun is _low overhead_ and the _days_ are _shorter_. This gives the sun little time to _heat_ Earth.
12. The two reasons that we have seasons are:
    1. _The Earth is tilted_
    2. _The Earth moves around the sun_

In the diagram below, label the picture that shows when it is summer in Utah, "Summer;" and the picture that shows when it is winter in Utah, "Winter."

Example A Summer	
Example B Winter