**The Reasons for the Seasons**

**Reference Page**

**Hypothesis:** Is an “if … then” statement such as, “If I add 20 mL of water to grass plants, then they will grow taller.”

**Key Terms:**

Aphelion – the furthest point in orbit from the sun

Axis – an imaginary straight line extending from the North to the South Poles, through the center of the

Earth

Elliptical Orbit – An oval path or ring, in which the Earth takes 365.25 days to complete around the sun once

Equinox – the sun is directly overhead at the equator resulting in equal daylight and night everywhere on

Earth

Perihelion – the closest point in orbit from the sun

Polaris – the North Star – the Earth’s axis points towards this in the Northern Hemisphere

Revolution – the time it takes to complete an orbit

Rotation – one complete spin on an axis, for Earth it is 24 hours

Season – one of the four quarters the year is divided

Solstice – two days of the year when the sun’s direct rays are the furthest north or south of the equator

Tilt – the slant of the Earth’s axis; it’s a 23.5° angle

**Latitude/Longitude Grid System of Earth:**

 North Pole

 Arctic Circle 66.5° N

Longitude

 Tropic of Cancer 23.5° N

 Equator 0°

Latitude

 Tropic of Capricorn 23.5° S

 Antarctic Circle 66.5° S

 South Pole

 *(Not drawn to scale; shown without 23.5° tilt to axis!)*