Test 1 Questions Solar Basics:

1. In Belize which has the greatest solar resource? North or South.

North as per map on slide.

1. Sunlight is in the form of what type of radiation?

Electromagnetic

1. What amount of energy is at the outside edge of the atmosphere?

1367 W/m2

1. What amount of energy is “One Sun”?

1000 W/m2

1. What device can measure the solar irradiance?

A Pyranometer

1. Describe the equinox?

When the sun crosses the equator when day and night are the same length of time everywhere on earth.

1. Describe what a sun chart is?

A chart that shows the path of the sun for a location for every month of the year.

1. What is the “PV” effect?

When solar energy is transferred to the electrons in the panel.

1. What does “STC” stand for?

Standard Test Conditions

1. Name three values listed on the spec sheet for a solar PV panel?

Maximum Power, Open Circuit Voltage, Short Circuit Current, Voltage at maximum power, Current at maximum power, Module efficiency.

1. What is the difference between conventional current flow and electron flow?

Conventional is positive to negative and electron is the opposite.