

Climate Literacy Assessment Key

I. In the blank write T for True statements and F for false statements:

1. Man is the only force, or cause for climate change. _____ *F*
Climate Literacy Principle 4
2. The El Niño Southern Oscillation is part of climate change. _____ *F*
Climate Literacy Principle 4
3. The magnitude and direction of climate change is the same at all locations on Earth. _____ *F*
Climate Literacy Principle 4
4. Climatologists and meteorologists use the same data to predict future atmospheric conditions. _____ *F*
Climate Literacy Principle 5
5. The survival of some animals is threatened by global warming. _____ *T*
Climate Literacy Principle 6
6. Scientists and economists predict that there will be both positive and negative impacts from global climate change. _____ *T*
Climate Literacy Principle 6
7. Freshwater is not threatened by climate change. _____ *F*
Climate Literacy Principle 7
8. Incidents of extreme weather are increasing. _____ *T*
Climate Literacy Principle 7
9. Infectious diseases will increase with global warming _____ *T*
Climate Literacy Principle 7
10. Climatologists and meteorologists use the same data to predict future atmospheric conditions. _____ *F*
Climate Literacy Principle 5

II. Complete each sentence by filling in the blank.

1. Average temperatures have increased markedly in the past 50 years, especially in the Polar Region.
Climate Literacy Principal 4
2. Humans are playing an increasing role in climate change.
Climate Literacy Principal 4
3. Carbon dioxide introduced into the atmosphere today may remain there for how long? a Century
Climate Literacy Principal 4
4. Besides historical records, scientists use natural records, such as Tree rings, Sedimentary levels, and Ice cores.
Climate Literacy Principal 5
5. Computer models represent the climate system and make predictions about its future behavior.
Climate Literacy Principal 5

6. Most of the observed increase in global average temperatures since the latter part of the 20th century is very likely due to human activities.
Climate Literacy Principal 6
7. Emissions from the widespread burning of fossil fuels since the start of the Industrial Revolution have increased the concentration of greenhouse gases in the atmosphere.
Climate Literacy Principal 6
8. Besides greenhouse gas deforestation is a human cause for climate change.
Climate Literacy Principal 3
9. Melting of Ice sheets and Glaciers combined with the thermal expansion of seawater as the oceans warm, is causing sea level to rise.
Climate Literacy Principal 7
10. The Chemistry, Acidity, or pH of the ocean water is changed by absorption of carbon dioxide from the atmosphere.
Climate Literacy Principal 7
11. This change in acidity threatens Marine, or Sea life.
Climate Literacy Principal 7

III. Chose the correct Answer

1. Earth's average temperature is now a than it has been for at least the past 1,300 years.
a. warmer b. cooler
Climate Literacy Principal 4
2. Natural processes that remove carbon dioxide from the atmosphere operate b when compared to the processes that are now adding it to the atmosphere.
a. slowly b. quickly
Climate Literacy Principal 4
3. Increasing carbon dioxide levels in the atmosphere is causing ocean water to become b acidic.
a. more b. less
Climate Literacy Principal 7
4. Changes in the duration of daylight and the amount of sunlight received at any latitude throughout a year are caused by a.
a. tilt of the Earth's axis relative to its orbit around the Sun
b. the rotation of the Earth around the Sun.
Climate Literacy Principal 1
5. When Earth emits the same amount of energy as it absorbs, its energy budget is b.
a. balanced b. unbalanced
Climate Literacy Principal 1

6. Satellite measurements taken over the past 30 years show that the Sun’s energy output has changed a.

- a. drastically b. slightly

Climate Literacy Principal 1

7. Carbon in the atmosphere is reduced naturally through b.

- a. animals b. plants

Climate Literacy Principal 2

8. The amount of solar energy absorbed or radiated by Earth is modulated by the a and depends on its composition.

- a. atmosphere b. sun

Climate Literacy Principal 2

9. Life—including microbes, plants, and animals and humans—is a major driver of the b and can influence global climate.

- a. water cycle b. global carbon cycle

Climate Literacy Principal 3

10. The distribution patterns of fossils show evidence of b extinctions related to climate change in the past.

- a. abrupt b. gradual as well as abrupt

Climate Literacy Principal 3

11. A range of natural records shows that the last 10,000 years have been an unusually a period in Earth’s climate history.

- a. stable b. unstable

Climate Literacy Principal 3

12. The abundance of greenhouse gases in the atmosphere is controlled by a that continually move these components between their ocean, land, life, and atmosphere reservoirs.

- a. biogeochemical cycles b. human actions

Climate Literacy Principal 2

13. Covering 70% of Earth’s surface, b exerts a major control on climate.

- a. land cover b. oceans

Climate Literacy Principal 2