## Climate Change Quiz\* How much do you know about climate change?

	_1. A ga is:	s produced by the burning of hydrocarbons (usually called "fossil fuels") A) oxygen. B) carbon dioxide. C) hydrogen. D) methane.
		most powerful greenhouse gas on earth is: A) water vapor. B) carbon dioxide arbon monoxide. D) nitrous oxide.
	Revo	tate change alarmists tell us that since the beginning of the Industrial plution, about 1850, the average temperature of the earth has risen about 5°C. B) 9°C. C) 1.2°C. D) 5.7°C.
		pe of electricity generation that doesn't produce greenhouse gases is uclear energy B) coal burning power plant C) combustion of ethanol
		percentage of carbon dioxide in the atmosphere is about 6.2%. B) 48% C) 3.6%. D) 0.04%.
		greatest natural source of carbon dioxide is A) plants. B) dairy cows. aciers. D) the ocean.
	_7. The	ideal temperature of the earth is A) 12°C. B) 15°C., The current temperature.
	C) 30	O°C. D) no one knows.
Tr	ue or Fa	alse?
T_	F	8. The earth's temperature is rising faster than ever before.
T_	F	9. The sea level is rising faster than it did during the $20^{\mbox{\scriptsize th}}$ century.
T_	F	10. We are experiencing more severe hurricanes, tornadoes, droughts and floods than ever before.
T_	F	11. A great deal of the ice in Greenland and the Arctic has melted and not been replaced by snow.
T_	F	12. The oceans have a big influence on climate.
T_	F	13. The polar bear population has been increasing for the last 20 years.
T_	F	14. 97% of all scientists believe that climate change is an existential threat to our planet. Therefore, you should too.
T_	F	15 We can keep Earth's temperature from rising by burning fewer fossil fuels such as coal and gasoline, because CO <sub>2</sub> is the control knob of temperature.

\*Answers are on the back of this paper.

## ANSWERS TO CLIMATE CHANGE QUIZ

- **1. B: carbon dioxide.** Mankind's CO<sub>2</sub> emissions from burning fossil fuels are about 4% of all carbon dioxide emissions. 96% is emitted by natural sources, such as the oceans, volcanoes and termites.
- **2. A: water vapor** and clouds. Water vapor makes up about 3% of the atmosphere and has about 70 times as much effect on temperature as carbon dioxide and other greenhouse gases.
- **3.** C: 1.2°C. As the percentage of carbon dioxide in the atmosphere rises, it has less and less effect on temperatures, because there are only two frequencies of long wave radiation that it can hang onto. Once these frequencies are saturated, additional  $CO_2$  has no more effect on the atmosphere.
- **4. A: nuclear energy** Nuclear energy is the best hope for our energy future, because it is relatively safe, reliable and inexpensive, once built. Many 60-year-old nuclear plants are still operational, whereas the average solar panel or wind turbine lasts only about 10-12 years. There is an almost unlimited supply of fuel (thorium & uranium). "Renewables" like sun and wind work only when the sun is shining and the wind is blowing. They also are very devastating to the environment!
- **5. D: 0.04\%** Carbon dioxide is a trace gas that plants use to make food for themselves and the animal kingdom. It is the gas of life, not a pollutant. Compared to a 100-yard football field, the amount of  $CO_2$  added to the amount in the atmosphere in 1850 is only ~3/8 of an inch. There have been ice ages in which there was 15 times as much  $CO_2$  in the atmosphere as there now is.
- **6. D: the ocean** A glass of soda quickly loses its fizz in a warm environment. Likewise, when ocean water warms, it gives off a great quantity of carbon dioxide. When it cools, it absorbs  $CO_2$ .
- **7. D: No one knows** what the earth's ideal temperature should be. However, during the Roman and Medieval Warm Periods when it was  $\sim$ 2° warmer than now, humanity prospered.
- **8. False** The slight increase in temperature during the last century is within the parameters of natural change. The fastest increase we know of was at the beginning of the last Pleistocene interglacial 15,000 years ago a long time before mankind began emitting carbon dioxide.
- **9. False** Sea level experts say that it is increasing at about 3 mm per year, or about 7" per century, the same as during the last 8,000 years. The media has also been circulating false stories about this.
- **10. False** Statistics show that the number and intensity of hurricanes, tornadoes, droughts, and floods is about the same as in the past. If you've been told otherwise by the media, you've been lied to. You need to ask these people for proof, which they cannot provide.
- **11. False** Although some glacier ice melts in the summertime, it is replaced by an almost equal amount of snowfall the following winter. Right now the Arctic ice level is average.
- **12. True** The Gulf Stream and other currents in the Atlantic Multidecadal Oscillation are currently exerting a warming effect on the Arctic. One cycle can last for several decades.
- **13. True** Experts say the polar bear population has increased from ~5,000 in the 1950s to ~25,000 today, due to a ban on hunting them. Anyone who tells you otherwise is lying to you.
- **14. False** The study that came up with this 97% figure was debunked. The majority of scientists do not believe the small amount of warming we've experienced is a threat. It is arrogant to believe that, beyond the urban heat island effect in cities, mankind can control the earth's temperature.
- **15. False** Mankind has no control over the earth's average temperature.

The earth's climate is dynamic and complicated. Factors such as solar cycles, cosmic rays and clouds are not well understood by climatologists. These are simply guessed at in their computer models. We are in no danger of burning up. We've been lied to thousands of times in media propaganda, just as we were in the COVID-19 flasco. Research these facts online! You'll conclude that climate change is really a political issue more than anything. (Check out the Club of Rome.)