Multiple Choice: Review of Ozone Depletion

Directions: Answer the multiple choice questions.

Questions

1. What class of chemicals is most responsible for destruction of stratospheric ozone?
volatile organics
metals
chlorofluorocarbons (CFCs)

2. Which statement is true about stratospheric ozone?
It is a harmful pollutant
It is not important to Earth
It blocks UV radiation

3. Which of the following is NOT a consequence of ozone depletion in the stratosphere?
infectious disease
increased sunburn
increased risk of skin cancer

4. What chemical element is released from a CFC molecule when the molecule reacts with sunlight?
lead
chlorine
carbon

5. Where is thinning of the ozone layer most pronounced?
tropics
poles
mid-latitudes

6. Which of the following resulted in decreased use of CFCs?
Montreal Protocol
Kyoto Protocol
World Climate Convention

Answers

1. chlorofluorocarbons
CFCs are the most dangerous in terms of the destruction of the ozone layer in the atmosphere.

2. It blocks UV radiation.
Stratospheric ozone is an important part of our atmosphere. It protects us against harmful UV radiation.

3. infectious disease
Both increased sunburn and increased risk of skin cancer are consequences of ozone depletion.

4. chlorine
The chlorine atom in the CFC molecule is released when sunlight hits it. That chlorine atom goes on to destroy ozone molecules.

5. poles
The ozone layer thinning is seen mostly over the poles.

6. Montreal Protocol
The Montreal Protocol resulted in a decrease in the use of CFCs in aerosols and air conditioners.