

#Jenny



Finally I get this ebook, thanks for all these I can get now!

#Rio



Cool! I'am really happy

#Markus Jensen



I did not think that this would work, my best friend showed me this website, and it does! I get my most wanted eBook

#Hun Tsu



wtf this great ebook for free?!

#Che Salsa



My friends are so mad that they do not know how I have all the high quality ebook which they do not!

#Diego Butler



so many fake sites. this is the first one which worked! Many thanks



Handwritten notes:  $2000 \text{ kg} \cdot 4.18 \times 10^3 \text{ J/kg} \cdot \text{K}$ ,  $2 \times 10^3$ ,  $2000 \text{ kg} \cdot 4.18 \times 10^3 \text{ J/kg} \cdot \text{K} = 1.672 \times 10^7 \text{ J}$

Temperature (°C)	Relative Humidity (%)	Wet Bulb Depression (°C)
20°C	0.04	0.05
25°C	0.06	0.07
30°C	0.12	0.13
35°C	0.20	0.15
40°C	0.30	0.20

- (a) Respond to the following using the data in the table above, which gives the rate of wood consumption by termites, in kg per ha per year, under various temperature and relative humidity conditions. Under optimal conditions, the emission rate of methane by termites is approximately 70 kilograms of CH<sub>4</sub> per year per 1,000 termites.
- (i) According to the data, what are the optimal temperature and relative humidity for termite activity?
- (ii) Given a density of  $4.5 \times 10^7$  termites per hectare and optimal conditions, calculate the annual amount of methane emitted, in kilograms, by the termites inhabiting a 2,000-hectare tropical rain forest.
- (iii) Suppose the temperature increases to 35°C and the relative humidity decreases to 50 percent. Using the data provided, determine the amount of methane, in kilograms, that would be emitted by the termites in the 2,000-hectare tropical rain forest.
- (iv) Explain why the population size of termites is also affected by temperature and humidity.
- (b) It has been observed that soon after a tropical rain forest is cleared, termite density increases to an estimated  $6.8 \times 10^7$  termites per hectare. Thereafter, the termite population size decreases dramatically.
- (i) What is the most likely reason that the density of the termites increases when a tropical rain forest is cleared?
- (ii) Why do the termite populations eventually decrease dramatically?
- (c) Describe one way, other than changes in termite activity, that tropical rain forest destruction contributes to anthropogenic climate change.

[Download PDF version of :](#)  
**Ap Environmental Science Chapter 1 Practice Test**