2. Respond to parts A, B, C, D, E, F, G, H, I, and J.

A. **Identify** the sea surface condition for the eastern equatorial area of the Pacific Ocean illustrated in Figure 1.

B. Based on the information in Figure 1, **identify** the climate phenomenon associated with the sea surface conditions shown in the equatorial area of the Pacific Ocean.

C. Based on the information in Figure 2, **describe** a difference in climate patterns between the regions A and B.

D. Increases in regional precipitation can lead to increased flooding in certain locations. **Describe** one reason why there is an increased risk of flooding in urban areas during extended periods of precipitation.

E. **Propose** a realistic solution a city could implement to decrease the risk of flooding in urban areas.

F. **Justify** the solution proposed in part E by providing an additional advantage other than a reduction in the risk of flooding.

G. Terrestrial biomes are primarily determined by temperature and precipitation patterns. **Describe** one difference between the climate of a temperate seasonal forest and that of a savanna.

H. Droughts are one environmental problem that can affect the frequency and severity of forest fires. **Identify** the ecological process that occurs following a forest fire that leaves the soil intact.

I. **Describe** one way burning forests contribute to atmospheric pollution.

J. **Describe** one sustainable forestry practice that could be used to reduce the occurrence or severity of forest fires.

Question 2: Analyze an Environmental Problem and Propose a Solution — 10 points

A	**Identify** the sea surface condition for the eastern equatorial area of the Pacific Ocean illustrated in Figure 1. Acceptable identification point: • (Ocean water) cooler than average	**Point 01**
B	Based on the information in Figure 1, **identify** the climate phenomenon associated with the sea surface conditions shown in the equatorial area of the Pacific Ocean. Acceptable identification point: • La Niña	**Point 02**
C	Based on the information in Figure 2, **describe** a difference in climate patterns between the regions A and B. Examples of acceptable responses may include the following: • Region A has an increased chance of precipitation, while Region B has a decreased chance of precipitation. • Region A will be wetter, while Region B will be drier.	**Point 03**
D	**Describe** one reason why there is an increased risk of flooding in urban areas during extended periods of precipitation. Examples of acceptable responses may include the following: • Impervious/paved surfaces increase runoff/reduce infiltration/reduce absorption. • Parking lots/roads/buildings/sidewalks increase runoff/reduce infiltration/reduce absorption. • There is less vegetation and, therefore, less infiltration/absorption.	**Point 04**
E	**Propose** a realistic solution a city could implement to decrease the risk of flooding in urban areas. Examples of acceptable responses may include the following: • Use permeable pavement • Plant vegetation/establish parks/create rain gardens/build green roofs • Install retention ponds/stormwater basins	**Point 05**