**Science 10 – TEST REVIEW – Tuesday, November 22, 2016**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ PLEASE COMPLETE BEFORE NOV 23/16**

**Section 3.1, 3.2, 3.3, and 3.7 of Textbook**

1. **Fill in the blanks (use notes/textbook).**
2. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ecosystem is one that meets the needs of present generations without compromising the needs of future generations.
3. The biome with the greatest biodiversity in Canada is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. The most fragile biome in Canada is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
5. The biome that covers the greatest amount of area in Canada is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
6. The biome with the least amount of naturally-occurring ecosystems remaining in Canada is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

See Figure 3, page 95 of your textbook to answer the following questions (#6 - #9).

1. The biome which has the least amount of precipitation on an annual basis is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. The biome which has the greatest amount of precipitation on an annual basis is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. The biome which has the greatest temperature range on an annual basis is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. The biome which has the highest mean annual temperature is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are the soil layers in the correct order from top downward.
6. The biome which has the thickest layer of topsoil is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
7. A monoculture is the result of planting a \_\_\_\_\_\_\_\_\_\_\_ crop in a large area. The crop may include grains, like \_\_\_\_\_\_\_\_\_\_\_\_\_\_, soybeans, corn, etc., or single species of trees that logging companies consider the most economically valuable.
8. Planting single crops of species of trees reduces \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (fewer varieties of plants and animals live there because of the restricted habitat.
9. A farmer sends a sample of soil to be analyzed and the report indicates that the soil is too acidic. The acidity can be reduced by adding \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to the soil.
10. A farmer sends a sample of soil to be analyzed and the report indicates that the soil is too alkaline. The alkalinity can be reduced by adding \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to the soil.
11. Humans can affect the pH by burning \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ fuels. These carbon-based compounds will also increase soil \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Section 3.7 and 3.11 of Textbook**

1. Multiple Choice – Select (circle) one correct response for each of the following. Use *Section 3.7* of textbook to answer the following.

1. Which of the following percentage of the total land surface of Earth is suitable for cultivating crops?

(a) 6 %

(b) 10 %

(c) 11 %

(d) 14 %

2. Some areas of the tropical rainforest are being cleared for agricultural uses. This is not a sustainable practice because:

(a) the cleared soil is too rich to grow most crops.

(b) the soil is poor and is depleted of its nutrients within a few years.

(c) humans tend to build cities on the cleared lands and take them out of production.

(d) the markets are too far away and is not economical to ship the agricultural products long distances.

3. Which of the following crops produce more food than all of the other agricultural crops combined?

(a) rice, corn, wheat, and oats

(b) legumes, oats, potatoes, and rice

(c) rice, soy beans, wheat, and barley

(d) rice, corn, wheat, and potatoes

4. The practice of growing monocultures of plants is:

(a) the best way of achieving a sustainable ecosystem;

(b) the best way to maintain a sustainable balance of nutrients without adding fertilizers;

(c) a threat to sustainability because a single disease or pest could wipe out an entire crop;

(d) a threat to sustainability because it is too expensive.

1. Multiple Choice – Select (circle) one correct response for each of the following. Use *Section 3.11* of textbook to answer the following.
2. Normally rainwater has a pH that is:

(a) slightly alkaline

(b) neutral

(c) slightly acidic

(d) strongly acidic

1. Which of the following is not an effect of acid rain?

(a) It kills bacteria involved in the nitrogen cycle.

(b) It promotes the growth of mosses that reduce the uptake of nutrients by tree roots.

(c) It causes the release of aluminum from the soil.

(d) Its effects are much more noticeable in western Canada than in eastern Canada.

1. \_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_ combine with oxygen to form oxides that are the main contributors to the formation of acid rain.
2. Limestone, nitrogen
3. Nitrogen, calcium
4. Nitrogen, sulfur
5. Calcium, limestone