Pal-Mac Invitational Saturday, January 14, 2012

REMOTE SENSING EVENT** ANSWER KEY

Short Answer

- 1. Remote sensing is the collection and interpretation of information about an object without being in physical contact with the object.
- 2. Active remote sensing is remote sensing methods that provide their own source of electromagnetic radiation to illuminate the terrain. Radar is one example.
- 3. Passive remote sensing is remote sensing of energy naturally reflected or radiated from the terrain.
- 4. SUBJECTIVE. Potential answers include:
 - a. Remote sensing is valuable because we can collect data in remote areas.
 - b. Remote sensing is valuable because we can monitor large geographic areas over many years.
 - c. Remote sensing is valuable because we can predict future changes on Earth.

Multiple Choice

- 1. B
- 2. B
- 3. B
- 4. C
- 5. A

Diagram Analysis

- 1. D
- 2. B
- 3. C
- 4. C

Matching

- 1. I
- 2. D
- 3. N
- 4. J
- 5. F
- 6. G
- 7. E
- 8. L
- 9. B

Image Analysis

Sea Surface Temperature

- 1. Equator or 0° latitude
- 2. Poles or 90° N and S latitude
- 3. Equator or 0° latitude
- 4. Poles or 90° N and S latitude
- 5. There is an area of cooler temperatures in the Pacific Ocean
- 6. The temperature is warmer in the Gulf of Mexico in September
- 7. Hurricanes

Snow Cover and Sea Ice

- 1. Melting snow-covered land
- "...the melting back of sea ice (e.g., in the Arctic and the floating ice shelves) will not directly contribute to sea level rise because this ice is already floating on the ocean (and so already displacing its mass of water)..." The snow-covered land would be adding new volume to the oceans. From: <u>http://www.climate.org/topics/sealevel/index.html</u>
- 3. The Himalayas lost snow-covered land.
- 4. Subjective: There could be immediate flooding. They could lose a source of drinking water. The climate could become drier there.
- 5. There is a lot more sea ice.
- 6. Warming could cause this change.

Larsen Ice Shelf, Antarctica

- 1. There is less ice cover in 2006.
- 2. There would be less ice cover in 2012.

Lake Hamoun, Iran

- 1. The lake dried up.
- 2. The water could have been diverted for farming or drinking water. Warming could cause evaporation.

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