Student Name: _____ Date: _____

Ch 7 Lesson 2 Review

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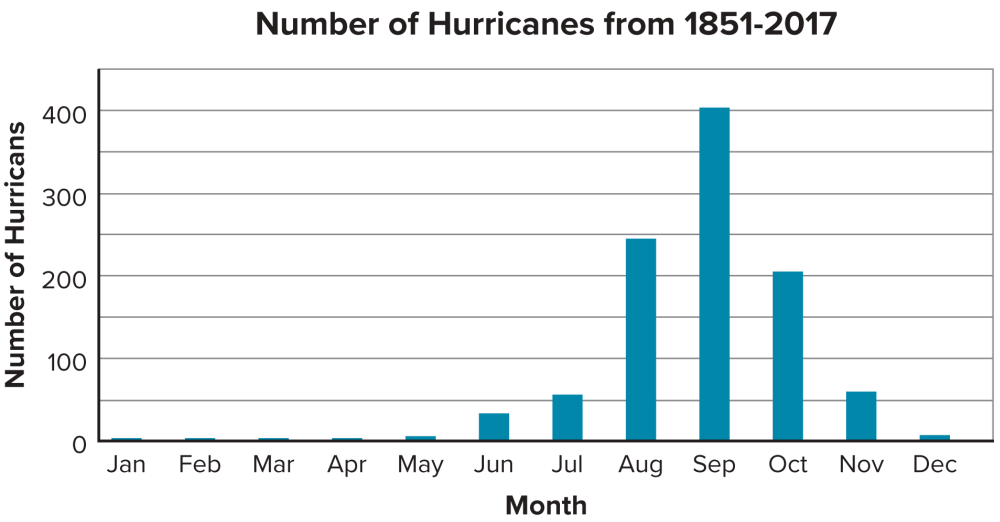
1) The Loop Current is a warm water ocean current that travels through the Gulf of Mexico. What happens to the intensity of a hurricane when it interacts with the Loop Current?

- ○ **A)** The intensity increases because the warm water and moist air mass give more energy to the hurricane.
- ○ **B)** The intensity remains the same because warm water and moist air mass have no effect on hurricane intensity.
- ○ **C)** The intensity decreases because the warm water and moist air mass remove the hurricane away from land.
- ○ **D)** The intensity decreases because the warm water and moist air mass redirect energy from the hurricane.

2) An analysis of when hurricanes form helped meteorologists better understand the conditions needed for their formation. The graph shows the number of hurricanes that formed by month from 1851 to 2017 in the Atlantic Ocean.



Based on your knowledge of tropical cyclone formation, at what time of year is the Atlantic Ocean the warmest?

- ○ **A)** October to December
- ○ **B)** January to March
- ○ **C)** June to August
- ○ **D)** August to October

3) What is the term for a large volume of water flowing in a certain direction?

- ○ **A)** surface current
- ○ **B)** ocean current
- ○ **C)** gyre
- ○ **D)** cyclone

4) A student wants to model the movement of a tropical cyclone in the southern hemisphere. What should the student do?

- ◯ **A)** Spin clockwise
- ◯ **B)** Spin counterclockwise
- ◯ **C)** Move in a straight line from west to east
- ◯ **D)** Move in a straight line from north to south

5) A recent storm uprooted several trees and caused minor structural damage to homes. The wind speed was recorded at one point as 163 km/h. Based on the table, how would this storm be categorized on the Saffir-Simpson Hurricane Wind Scale?

Saffir-Simpson Hurricane Wind Scale

Category	Wind Speed	Typical Damage
1	119– 153 km/h	Winds damage unanchored mobile homes and poorly constructed signs. Some coastal flooding and minor pier damage occurs.
2	154– 177 km/h	Some damage to building roofs, doors, and windows occurs. Mobile homes have considerable damage. Flooding damages piers, and small craft in unprotected moorings may break their moorings. Some trees are blown down.
3	178– 209 km/h	Some structural damage occurs to small residences and utility buildings. Large trees are blown down. Mobile homes and poorly built signs are destroyed. Flooding near the coast destroys smaller structures. Larger structures are damaged by floating debris, Inland terrain may be flooded.
4	210– 249 km/h	Some complete roof-structure failure occurs in small residences. Major erosion of beach areas occurs, and terrain may be flooded far inland.
5	> 249 km/h	Many residences and industrial buildings experience complete roof failure. Some complete building failures, with small utility buildings blown over or away. Flooding causes major damage to the lower floors of all structures near the shoreline. Massive evacuation of residential areas may be required.

- ◯ **A)** Category 1
- ◯ **B)** Category 2
- ◯ **C)** Category 3
- ◯ **D)** Category 4