# **NOAA Learning Objects**

Please listen to the interactive presentations and answer the questions below, the questions are in the order of the presentation

### **Ocean Currents**

- 1. What are the small currents that flow off the Gulf Stream called?
- 2. How long do these shorter currents last compared to the Gulf Stream?
- 3. What are the three primary factors that create currents?
- 4. What is the dominate surface pattern of ocean circulation called?
- 5. \_\_\_\_\_\_ is the most important cause of surface currents.
- 6. What causes the surface currents to flow at an angle from the wind direction?
- 7. What directions to gyres travel in the northern hemisphere? southern hemisphere?
- 8. What current in the north Atlantic gyre is strongest and deepest?
- 9. How long does it take for this gyre to fully circulate?
- 10. What current is responsible for bringing icebergs south causing the Titanic to sink?
- 11. What currents bring cold water to the surface along with nutrients for fish populations?
- 12. How long does the global conveyor belt take to circulate all of the oceans?

13. Where does the conveyor belt begin?

# Global Impact

- 1. What are two ways that humans are dependent on ocean currents?
- 2. What is found at upwelling zones that is the base of the food chain?
- 3. What types of currents circulate heat from the tropics to the poles?
- 4. What could shut down the global conveyor belt?
- 5. What would happen if the global conveyor belt does shut down?
- 6. How long could catastrophe take? \_\_\_\_\_

# Hurricanes

- 3. What are the two ingredients that cause a hurricane to form?
- 4. What are the minimum wind requirements for a hurricane?

- 5. What winds blow from the west that bring hurricanes to the Carribbean, North and Central America?

### *Global Impact*

- 1. What the hurricane that killed over 8,000 people in 1900 called?
- 2. With warming ocean waters, what pattern has occurred?
- \_\_\_\_\_ 3. How many people live on or near the coast in the U.S.? \_\_\_\_\_