Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_\_\_\_

**RIVER BASINS, ESTUARIES AND ECOSYSTEMS OF NORTH CAROLINA PROJECT**

*Adapted from Diane Jackson, 8th Grade Science Teacher*

You will work independently to complete a series of activities detailing river basins, estuaries, and ecosystems of North Carolina. The activities will count as a test grade. You will be graded on the quality of the activities you complete, so work efficiently, thoroughly and to the best of your ability.

Each activity must be completed on a separate sheet of paper. **LABEL** each assignment with the **NUMBER** in the **UPPER LEFT CORNER** and ***YOUR FULL NAME ON THE TOP RIGHT CORNER!!***

**Objectives**

\*Explain the structure of the hydrosphere including: Local river basins and local water availability.

\*Evaluate estuaries and river basins of North Carolina as they exemplify the fact that these are reservoirs of nutrients, minerals, and life forms.

\*Evaluate the value and sustainability of North Carolina’s wetland ecosystems.

\*Illustrate how terrestrial and aquatic food webs are interconnected.

\*Describe how humans are affecting water quality.

**Activities**

*Use the* ***Discover North Carolina’s River Basins*** *Booklet*

1. **Reading Analysis Questions**: Complete the River Basin Scavenger Hunt worksheet as you read the booklet. **(50 points)**
2. **Environmental Education** Choose one of the following: **(15 points)**

**Discuss OR illustrate** four reasons environmental education is important. (See below)

a. Write an essay. (At least 4 paragraphs) **OR**

b. Create a COLOR cartoon. (At least 4 panes, blank paper)

1. **Government Intervention:** Pages 6 and 7 describe how a decline in water quality led to federal government involvement. Discuss the outcomes of the federal government’s involvement and North Carolina’s response to this? (Paragraph form! – 4 main points)

**(15 points)**

1. **Buffers:** Draw a river with a vegetative/riparian buffer AND a river with no vegetative buffer. Below **each** drawing list at least 4 effects on the river and the plants and animals living in or near the river. (Blank paper, colorful!) See pages 6 and 9.

**(20 points)**