

Earth/Environmental Science Homework & Test Review**Week 5: May 4th – May, 8th, 2015****DUE DATE: Friday, May 8th****Weekly Reminders Checklist:**

- Test on Thursday, May 7th.

Study: Homework 4; Homework 5; article questions on *Causes of Declining Biodiversity*; Biome Map & Tables; Ocean Acidification Lab; Ocean Abiotic Factors Activity; Planet Earth – Seasonal Forests movie guide

- Have you checked PowerSchool to see if you have any missing assignments? Progress Reports go out on Friday!

Vocabulary: Fill in the missing areas on the table below using your textbook, class activities and any other resources you find helpful.

Vocabulary Word	Definition	Example/Application
Ecological Niche	the role that an animal or plant species plays in the ecosystem	in a deciduous forest there is a niche for an organism that can fly and eat nectar from blossoms.
Invasive Species	Plants, animals, or other organisms that are introduced to an area outside their original range and cause harm to the ecosystem	Fire Ant, Kudzu (for NC)
Endangered Species	species which are threatened with destruction due to habitat destruction or other factors	Humpback whale, Green pitcher plant
Endangered Species Act of 1973	Designed to protect and recover endangered species and the ecosystems upon which they depend	Signed into law by President Richard Nixon
Carrying Capacity	number of living things (plants and animals) any area of land or water can support at any one time	See Graphs on Back Page
Overpopulate	when a population of a species exceeds the carrying capacity of its ecological niche	Due to increase in births, decline in mortality rates, etc.

Key Questions from the Week: Answer the questions below pertaining to this week.

1. List the effects of invasive nonnative species (plant and animal) on an ecosystem.

- **Displace native species**
- **Reduce native wildlife habitat**
- **Reduce forest health and productivity**
- **Alter ecosystem processes**
- **Degrade recreation areas**

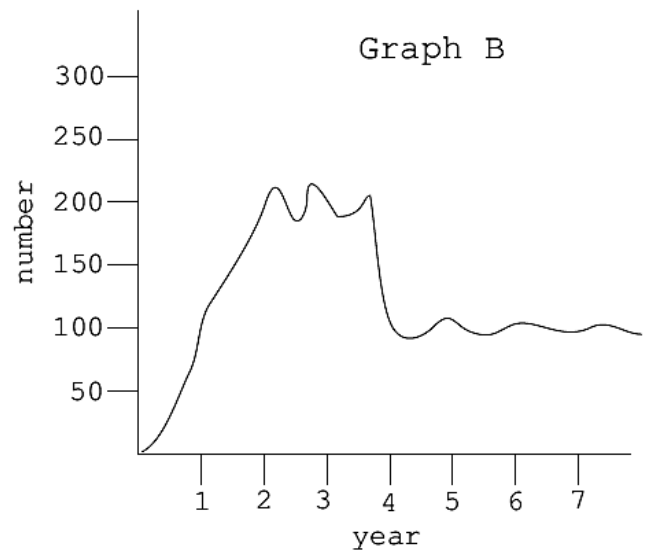
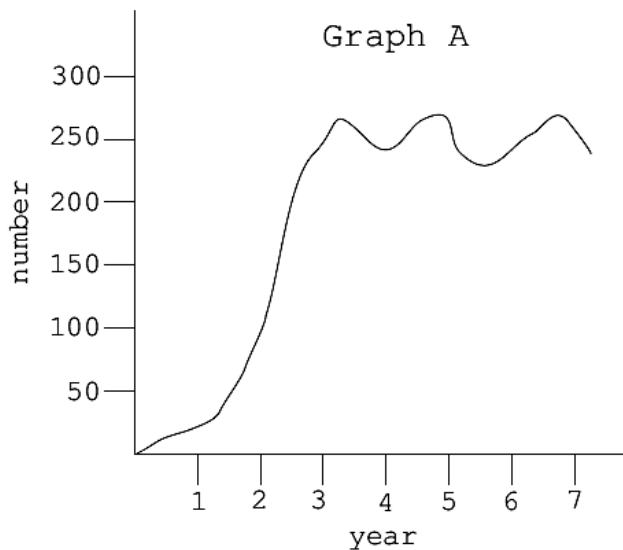
2. What are three factors that the carrying capacity of an ecosystem depends on?

1	The amount of resources available in the ecosystem
2	The size of the population
3	The amount of resources each individual is consuming

3. Describe the activity and explain the effects on various plant and animal species:

Activity	Description & Effect
Human Population Growth	Our increasing numbers are using excessive amounts of the Earth's limited resources.
Habitat Alteration or Destruction	Through direct harvesting, pollution, atmospheric changes, and other factors habitats are altered or destroyed, loss of biodiversity.
Overharvesting	Threatens biodiversity by harvesting renewable resources too quickly resulting in extinctions and loss of biodiversity

Graphs from the Week: Answer the questions below pertaining to the following graphs on carrying capacity.



4. For Graph A:

- What is the approximate carrying capacity? **250**
- Approximately during which year did this population reach the carrying capacity of its ecosystem?
Year 3
- About how many years did it stay at the carrying capacity? **4**

5. For Graph B:

- What are the carrying capacities of this graph? **200 and 100**
- How many years did this population spend at the first carrying capacity? **2**
- During which year did it reach the next carrying capacity? **Year 4**
- Which carrying capacity is more stable? Why do you think so?

The second one because the population is more stable at it (it stayed at the second carrying capacity longer).

Research Question for the Week: Conduct research using the library and internet resources to answer the following question:

6. Summarize two ways to mitigate human impact on the biosphere.

- Maintain a healthy ecosystem by not over killing plants/animals**
- Limit the transport and spread of invasive species**