NAME: Date:

**Ecology**

**Species Interdependence & Human Influence**

1. Write down your simplest definition for the term “biosphere”.

1. About of the Earth’s biosphere is available for human habitation.
2. Go to <http://www.ibiblio.org/lunarbin/worldpop>. In 2006 there were an estimated billion humans on the earth.
3. In the chart below place dots for the data points provided by <http://www.biologycorner.com/worksheets/humanpop_graph.html>

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|  | 1900 |  | 1950 |  | 2000 |  | 2050 |  |

12

11

10

9

8

7

6

**Number of humans**

**(billions)**

5

4

3

2

1

1850

##### Year

1. How many years did it take after 1850 for the world population to double in size?
2. How many years did it take for the population to double in size after 1950?
3. If this trend continues, in what year will our world population double in size from 2006?
4. With any population, what factors will limit it’s size?

1. What have humans done to help our world population grow so fast?

1. What other organisms do humans depend upon / need to survive?

1. What have humans done to **positively** influence the survival of these other organisms?

1. What have humans done to **negatively** influence the survival of these organisms?

1. Can you think of any direct examples where humans have **negatively** influenced their own populations’ survival or ability to carry out basic life functions?

1. Identify what you think are the three most critical steps humans **must** take to help maintain the ecological balance between plants and humans.

1)

2)

3)