

Human Population Objective Sheet

AP environmental science Chapters 2, 9 and 11

Name _____
Date _____ Period _____

1. What is carrying capacity?
2. What are limiting factors? How do limiting factors affect carrying capacity?
3. Explain the difference between density-dependent and density-independent limiting factors. Give several examples of each.
4. Describe the three parts of the standard "S" curve of population growth.
5. Compare graphs of linear and exponential growth.
6. Distinguish between r-strategists and K-strategists, and give two examples of each. Draw the type of survivorship curve you would expect each type of strategist to exhibit.
7. Define zero population growth. Define biotic potential. List four factors which contribute to biotic potential.
8. Describe the population cycles of a predator and its prey.

9. Who was Malthus? About when did he live and what did he predict would happen to global human population?
10. Define birth rate, death rate, emigration rate, and immigration rate. Write an equation to mathematically describe the relationship between these rates and the rate of population change.
11. Describe hunter-gatherers and describe their populations.
12. What was the agricultural revolution?
13. Why did the human population grow after the agricultural revolution? Give two reasons.
14. When did population start its dramatic increase? What caused the only dip in the population graph around 1300?
15. Why are the years 1800 and 1999 significant for the global human population?
16. Name three improvements that caused population to increase after 1930.
17. What is the current global population? How large might it be by 2100?

18. Compare rates of population growth in developed countries and developing countries. Explain the differences you find.
19. Which countries have shrinking populations and why are they shrinking? What challenges will these countries face in the next decades?

20. What is demography?
21. Distinguish between replacement-level fertility and total fertility rate. Describe how total fertility rate affects population growth. List factors that affect birth and fertility rates and factors that affect death rate.
22. Define infant mortality rate, per capita income and life expectancy. Explain why these measures are considered good indicators of quality of life.
23. Why is TFR of 2.0 NOT considered to be replacement rate fertility?
24. What is a histogram? What kinds of information can you learn from one?
25. Describe the four stages of demographic transition. List social, biological, political and economic issues that can be addressed to help developing countries undergo a demographic transition.

26. How are doubling rate and future population size calculated?

27. Compare and evaluate the population policies of India and China. Summarize what we have learned from decades of trying to influence human population growth.
28. List the major goals of the UN conference on Population and Development.
29. Explain the formula $I=PAT$. How can it be used? Who developed this formula and what book did he write in the 1960's?

<p>Extra Credit for this unit: Bring in ONE of the following: a bag of Hershey's kisses, peanuts in the shell or individually-wrapped mints. +5 on Population test.</p> <p>DUE on the day of the test, no later!</p>				<p>Fri Feb 29</p> <p>Population Ecology Notes</p> <p>HW – Read p199-206; answer Obj #1-8; study for quiz</p>
<p>Monday March 3</p> <p>Quiz – Obj #1-8 population ecology</p> <p>Notes – Human population history</p> <p>HW – Obj #9-17; p 24-27</p>	<p>Tuesday Mar 4</p> <p>Explain Debate; “apply” for roles;</p> <p>Video – comparison of India/Japan</p> <p>HW – Obj#18-19; gather data for debate – to be stamped on Friday. www.prb.org</p>	<p>Wed March 5</p> <p>ELA TAKS Seniors report 12:00 noon</p> <p>5th/7th period: finish video</p> <p>HW – Obj#18-19; gather data for debate – to be stamped on Friday. www.prb.org</p>	<p>Thursday March 6</p> <p>6th period: Finish video</p> <p>HW – Obj#18-19; gather data for debate – to be stamped on Friday. www.prb.org</p>	<p>Friday March 7</p> <p>Demographic notes</p> <p>Plan with debate partners</p> <p>HW – Worksheet: Demographic transition and histograms ; Obj #20-25</p>
<p>Mon March 10</p> <p>Turn in worksheet</p> <p>Practice demographic math</p> <p>HW – study for quiz tomorrow; answer #26</p>	<p>Tues March 11</p> <p>Quiz – Obj #20-26</p> <p>Solutions day!</p> <p>Organize for debate</p> <p>HW – be prepared for debate tomorrow! Obj #27-29</p>	<p>Wednesday March 12/Thurs March 13</p> <p>DEBATE!</p>		<p>Friday March 9</p> <p>NO SCHOOL</p> <p>HW – HAVE A FABULOUS BREAK!!!</p>
<p>SPRING BREAK ! ! ! ☺</p>				
<p>Last day of break!</p>	<p>Tuesday march 25</p> <p>Review day</p>	<p>Wed March 26/Thursday march 27</p> <p>Test - Population</p>		<p>Friday March 28</p> <p>Activity: Food For Thought</p>

AP TEST PREP SESSION!!! 8:30-2:30 April 5 and April 26th. !!!!! Prizes and Pizza!