

Madison Wigley

SoL §112.34. Biology: general requirements part 4 and (C) Knowledge and skills part 3(D)

Activity Outline – “The Impact of Forestry: How it Affects Us and How We Affect It”

- I. Introduction to Lesson Goals – **3 minutes total**
 - A. Madison Wigley
 - i. Undergraduate Senior at Texas A&M
 - ii. PINEMAP intern
 - B. Science vs. Social Ethics
 - i. How is scientific knowledge being applied to the Forestry industry in order to better uphold social ethical standards?
 - C. What impact has scientific research had on society and the environment?
 - i. Does recycling actually help secure resources?
 - ii. Can we do anything to mitigate effects of global warming?

- II. Body – **40 minutes total**
 - A. Our Current Lifestyle: Plant Dependent – **5 minutes**
 - i. Place various items on desks and ask students to determine if plants contributed to their manufacture.
 - ii. Discuss how plants were involved in the making of the products.
 - B. How are trees really grown? – **25 minutes**
 - i. Southeastern Pine Plantations
 1. The use, and non-use, of GMO's
 - a. *What is a GMO?*
 - a. *How trees are actually selected and bred*
 1. Myths v. Truths about trees growing ‘unnaturally fast’
 - a. *Ask students to compare and guess the ages of 2 tree discs of equal age, one with small growth rings and one with large.*
 - a. *How careful placement and thinning produces ‘natural’ effects*
 1. Impact on Environment
 - a. *PINEMAP*
 - i. Scientific research
 - a. *Sustainable Forestry Initiative*
 - i. Application of knowledge to uphold social ethics
 - C. Does recycling actually help secure resources? – **10 minutes**
 - i. Myths about ‘saving’ trees
 1. The line between scientific knowledge and social wants
 - ii. Impact of landfills
 1. Social acceptance of consumerism vs. scientific knowledge of its impacts
 - iii. How and why you should reduce your waste

- III. Conclusion – **7 minutes total**
 - A. Importance of distinguishing scientific knowledge from social myths - **1 minute**
 - B. We are dependent on plants and thus the environment – **1 minute**
 - C. Questions? – **5 minutes**