

What is not an example of human capital? a) Labor b) Intelligence c) Culture d) Cash



In order to continue to minimize the thickness of consumer electronics some sacrifices to green engineering principles have been made. Some batteries are now glued into the bodies instead of being mounted with conventional fasteners, this is an example of a poor decision related to which of the 12 principals? a) meet need, minimize excess b) design for separation c) prevention instead of treatment d) maximize efficiency



What is a secondary pollutant? a) harmful chemical emitted directly into the air by natural events or human activities b) harmful chemical formed in the atmosphere when a primary air pollutant reacts with normal air components or other air pollutants c) interaction between ground water and surface water



The aspects of a sustainable community include all except: a) resilient: adaptable to environment change, natural hazard mitigation b) populated: stable death and birth rates c) green: efficient land, water and air usage d) livable: stable economy, affordable housing



Which of the following is true about toxicology: a) most substance are toxic at some level b) exposure pathway is irrelevant to effect of poison c) toxicity can easily be measured by devises and machines d) acute exposure occurs over long periods of time and the effect could take years to be realized



Which of these is not an example of natural capital? a) wetland water filtration in Louisiana b) sand dune storm barriers in OBX c) consumption of bottled water



Which of the following is not part of the triple bottom line? a) economy b) society c) environment d) transportation e) performance

What is the largest consumer of water? a) agriculture b) electricity and gas c) households d) manufacturing

Under the Clean Air Act, EPA is required to set forth National Ambient Air Quality Standards (NAAQS) for the six most common air quality pollutants. Which pollutant does not apply? a) Carbon Monoxide b) Sulfur Dioxide c) Carbon Dioxide d) Ozone

Which of the following is not a green engineering principle? a) output pulled rather than input pushed b) renewable rather than depleting c) maximize efficiency d) follow the triple bottom line

Which is a phase of the life cycle analysis? a) extraction b) manufacturing c) use d) all of the above

Using hazardous nuclear fuel that generate harmful wastes is a good example of using Inherent rather than Circumstantial engineering principles. True or False?

Which of these industries produces the most waste water? a) manufacturing b) transit c) agriculture d) marketing

Which of the following is not one of the 12 Principle of Green Engineering? a) Design for Commercial "Afterlife" b) Conserve Complexity c) Circumstantial Rather than Inherent d) Minimize Material Diversity

T/F: Capacity factor is directly dependent on efficiency.

Which of the following is not a principle of Green Engineering? a) minimize excess b) renewable rather than depleting c) inherent rather than circumstantial d) treatment instead of prevention

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T/F: Efficiency is energy in over energy out.



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T/F: Industrial Symbiosis occurs when manufacturing and service businesses work together to enhance environmental and economic performance in managing resources.



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IPAT stands for: a) Impact Population Affluence and Technology b) Impact Pollution Affluence and Techonology c) Influence Population and Technology d) Impact Population Affluence and Time



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Which of the following is not a type of load-carrying building? a) internal load dominated b) envelope load dominated c) shear load dominated



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T/F: Point-source pollution refers to diffuse contamination that does not originate from a single discrete source such as storm water runoff or runoff from an agricultural field or forest



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Which of these factors doesn't decrease smog? a) rain b) high temperature c) snow d) hills e) winds



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What factor does not affect Toxicology? a) concentration b) exposure pathway c) species d) geography



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Which of the following are natural capital? a) wetlands b) forests c) atmosphere d) all of the above e) none of the above



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Which is not a green engineering principle? a) integrate material and energy flows b) conserve complexity c) inherent rather than circumstantial d) reducing cost to reduce waste



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T/F: Ozone can be both harmful and beneficial



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T/F: Extraction, transportation, manufacture, use, disposal/recycle are all stage in the life cycle.



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T/F: CO<sub>2</sub> is the greenhouse gas produced most (by mass) in the world.



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What can green engineering improve to reduce impact? a) technology b) affluence c) population



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T/F: Green engineering requires the environmental impacts to be considered initially as a design criteria.



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T/F: Renewable energy sources make up the largest percentage of the United States energy production.



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T/F: Efficiency is the (Energy In)/(Energy Out in Usable Form)



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T/F: Capacity Factor is the (Total Energy Produced per Time)/(Total Energy at Full Capacity)



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T/F: Refrigerator size and efficiency have decreased over the past 30 years.



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Which of the following vehicles has the greatest amount of CO<sub>2</sub> emissions per passenger mile? a) SUV b) train c) car d) airplane



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Which is not one of the three P's of the EPA 3P? a) People , b) Planet , c) Profit , d) Process

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