

## I. Group Project for Asteroid Collisions

All projects require analysis and comparison of ECO mitigation systems found in the Air Force study in your packet entitled "Planetary Defense: Catastrophic Health Insurance for Planet Earth." (Pages E22–end).

By Monday Dec 11, each group is to submit, preferably in Word (alternate: html code), the answers to #1 and #2. These will be posted on Blackboard. In class on Tuesday 12th, each group will give a brief statement of their preferred option, and argue with other groups that theirs is best because... (Class members can ask questions or offer opinions/reasons).

Each group now has a Blackboard Small Group location identified by campus.

FYI, the cost of any project must be seen in the alternative uses of that money.

<b>NASA</b>	<b>\$14.2 Billion</b>	<b>Trident II Strategic Sub</b>	<b>\$6 B</b>
<b>Environmental Protection Agency</b>	<b>\$ 7.2 B</b>	<b>Aircraft Carrier</b>	<b>\$4 B</b>
<b>Public Health Service (includes CDC)</b>	<b>\$21 B CDC= \$3 B</b>	<b>Aegis Cruiser</b>	<b>\$2 B</b>
<b>US Defense Dept</b>	<b>\$270.8 B</b>	<b>US Energy Dept. budget</b>	<b>\$18.9 B</b>
<b>National Science Foundation</b>	<b>\$4.6 B</b>	<b>National Institute of Health budget</b>	<b>\$14.7 Billion</b>

<p>Group One: UW Baraboo</p> <p>Student 1 Student 2 Student 3</p>	<p>1) Compare Kinetic Energy system with a Force Shield, and Mass Driver/Reaction Engine: pros/cons including strictly-US endeavor or cooperative international project.</p> <p>2) Which would you recommend and why.?</p>
<p>Group Two: UW Marathon</p> <p>Student 4 Student 5 Student 6</p>	<p>1) Compare Propulsion system with Gravity Manipulators and Solar Sails: pros/cons including strictly-US endeavor or cooperative international project.</p> <p>2) Which would you recommend and why?</p>
<p>Group Three: UW Rock</p> <p>Student 7 Student 8 Student 9 Student 10</p>	<p>1) Compare Laser system with Solar Sails, and Magnetic Field: pros/cons including strictly-US endeavor or cooperative international project.</p> <p>2) Which would you recommend and why?</p>
<p>Group Four: UW Marathon</p> <p>Student 11 Student 12 Student 13 Student 14</p>	<p>1) Compare Nuclear/ Chemical/ Antimatter Explosives system with Solar Collector, and Tractor Beams: pros/cons including strictly-US endeavor or cooperative international project.</p> <p>2) Which would you recommend and why?</p>
<p>Group Five: UW Waukesha</p> <p>Student 15 Student 16</p>	<p>1) Analyze and evaluate Microwave system with ECO-eater: pros/cons including strictly-US endeavor or cooperative international project.</p> <p>2) Which would you recommend and why?</p>
<p>Class Discussion following reports:</p>	<p>Would you be willing for the US to finance and develop the full PDS plan suggested by the Air Force on p. E29? Just R&amp;D or full deployment? All or just part of it, and which part?</p> <p>Would you support it (any part of it) if the US were to pay half, with other countries paying some and their scientists participating in the project? Why?</p>