**Us or Them!**

Some diseases are transmitted to humans from animals (zoonotic diseases). Occasionally people will propose that the animals that give us these diseases should be wiped out to keep humans safe.

Working in a group of 4 you will explore this idea for one of the diseases below:

**Hantavirus Lyme disease African Trypanosomiasis (sleeping sickness) Ebola**

Working as a group you will evaluate the impact of these diseases and the ecological role that the organisms that transmit these diseases (vectors) play. Once you understand the severity of the disease and the ecology of the vector organism, you will work to develop a method for eliminating the disease carrying species and ultimately decide if the organism should be wiped out to help humans.

To do this each member of your group must become an expert on one part of this project. Each group member will take on a role.

In your group of 4 you will fill one of the four following roles

* **The doctor** – Researches the disease
* **The ecologist** – Researches the organism and its ecological connections
* **The engineer** – Develops plan to eliminate the target organism
* **The executive** – Organizes and motivates the group. Uses information from the experts to make the final decision and argument.

You will each have a data sheet you must fill out as you research and develop your part of the project. But you must continue to share and collaborate with your group members to get the job done. On the due date you will present your project and ultimate decision on if the vector species should be wiped out. The presentation should be between 3-5minutes long. All group members must participate and contribute to the presentation. The presentation will be graded on the following rubric.

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| **Topic** | **0** | **1** | **2** | **3** |
| **Description of the disease** | Not Included | 3 or fewer items from doctor data sheet included. | 1 or 2 items from doctor data sheet missing. | All data from doctor sheet clearly presented |
| **Ecological role of vector species** | Not Included. | 3 or fewer items from ecologist data sheet included. | 1 or 2 items from ecologist data sheet missing. | All information from ecologist data sheet included. |
| **Proposal for elimination of the species** | Not included | 3 or fewer items from engineer data sheet included. | 1 or 2 items from engineer data sheet missing. | All information from engineer sheet included. |
| **Executive summary and decision.** | Not included | Executive summary confusing or decision unclear. | Executive summary did not add to presentation and simply restated presentation. | Executive summary included and decision was well explained. |
| **Visuals** | Presentation lacked any visuals or structure. | Few pictures of poor quality.  Text sloppy or hard to read. | Several relevant pictures.  Text heavy. | More than 5 high quality relevant images.  Good balance between text and images. |
| **Time** | Less than 1 min  More than 7 min | Less than 2 min  More than 6 min | Less than 3 min  More than 5min | Presentation 3-5 minutes |