**Pathogen Wanted Poster Research Project**

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| **Bacterial Pathogens/Diseases** | |
| **Pathogen** | **Disease** |
| 1. Bacillus anthracis | Anthrax |
| 1. Bordetella pertussis | Whooping cough |
| 1. Clostridium botulinum | Botulism |
| 1. Clostridium perfringens | Gas gangrene |
| 1. Clostridium tetani | Tetanus |
| 1. Corynebacterium diphtheria | Diphtheria |
| 1. Escherichia coli | Acute pyelonephritis |
| 1. Francisella tularensis | Tularemia or Rabbit fever |
| 1. Hemophilus influenzae | Meningitis |
| 1. Lactobacillus acidophilus | Cavities |
| 1. Mycobacterium leprae | Leprosy (Hansen’s Disease) |
| 1. Mycobacterium tuberculosis | Tuberculosis |
| 1. Neisseria gonorrhoeae | Gonorrhoea |
| 1. Neisseria meningitidis | Spinal meningitis |
| 1. Rickettsia richettsii | Rocky Mountain Spotted Fever |
| 1. Rickettsia prowazekii | Typhus |
| 1. Salmonella typhi | Typhoid fever |
| 1. Salmonella typhimurium | Food poisoning |
| 1. Shigella dysenteriae | Dysentery |
| 1. Streptococcus mutans | Cavities |
| 1. Streptococcus pneumonia | Pneumonia |
| 1. Streptococcus (group A) | Scarlet fever |
| 1. Streptococcus (group A) | Rheumatic Fever |
| 1. Treponema pallidum | Syphilis |
| 1. Treponema pertenue | Yaws |
| 1. Vibrio cholera | Cholera |
| 1. Yersinia pestis | Plague |

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| **Viral Pathogens/Diseases** | |
| **Pathogen** | **Disease** |
| 1. Rhinovirus | Common Cold |
| 1. Influenza Virus | Flu |
| 1. Polio Virus | Poliomyelitis |
| 1. Variola | Small pox |
| 1. Paramyxovirus | Measles |
| 1. Varicella | Chicken pox |
| 1. Ebola Virus | Ebola |
| 1. Epstein-Barr Virus | Mononucleosis |
| 1. Hepatitis B Virus I | Hepatitis B |
| 1. Herpes simplex virus | Cold Sores |
| 1. Varicella zoster | Shingles |
| 1. Corona Virus | SARS |
| 1. Influenza virus | H1N1 |
| 1. Human papilloma virus | HPV |
| 1. HIV | AIDS |

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| **Protist Pathogens/Diseases** | |
| **Pathogen** | **Disease** |
| 1. Trypanosoma brucei | African Sleeping Sickness |
| 1. Giardia lamblia | Giardiais |
| 1. Plasmodium falciparum | Malaria |
| 1. Entamoeba histolytica | Amoebic Dysentery |

**Background Information:**

Students will research one pathogen (bacteria, virus, or protest) and produce a “Wanted Poster”.

**Student Requirements:**

Students will randomly draw one of the above pathogens from the list above. They will then produce a wanted poster with the give parameters.

**Project Description/Abstract:**

Make a wanted poster for one of the pathogens listed above. Poster is to be on construction or poster board paper. Include:

1. \_\_\_\_\_ Picture of the bacteria (electron micrograph or microscopic picture/diagram)
2. \_\_\_\_\_ Description of the pathogen (bacteria, virus, or protest)
3. \_\_\_\_\_ Organism’s M.O. (police jargon) (How the organism attacks and spreads)
4. \_\_\_\_\_ Most common victims to prey upon & number of victims
5. \_\_\_\_\_ Hide out of the culprit (where it is most likely to be found and how it spreads)
6. \_\_\_\_\_ Most common injury done to victim
7. \_\_\_\_\_ Is it considered armed and dangerous? Rate the degree of damage caused.
8. \_\_\_\_\_ Most effective weapons against the germ
9. \_\_\_\_\_ Any other identifying characteristics (ex. Some criminals have tattoos)
10. \_\_\_\_\_ Bibliography

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| **Points** | **Excellent (10)** | **Average (7)** | **Not Your Best (5)** | **Missing (0)** | **Points**  **Earned** |
| **Picture of pathogen** | Hand drawn, shows lots of details, color, attractive, catches the attention of someone walking by the poster. | Looks like every other bacteria out there. No details. One color. | Looks like blob, no detail. No color. |  |  |
| **Description of pathogen with other identifying characteristics** | Written description is helpful in “picturing” what the bacteria may look like. | Written description is somewhat helpful in “picturing” what the bacteria may look like. | Written description is missing many details. Not much help in “seeing: what the bacteria may look like. |  |  |
| **How the organism attacks and spreads** | Reader can fully understand how the organism attacks its victim and spreads. | Reader can somewhat understand how the organism attacks its victim and spreads. | Reader is left unclear about how the organism attacks its victim and spreads. |  |  |
| **Most common injury done to victim** | Reader can fully understand possible injuries. | Reader can somewhat understand the possible injuries. Details are missing. | Reader is confused about possible injuries. |  |  |
| **Most common victims and number** | Several victims are given along with average infection number per year. | Only one victim is given along with average infection number per year. | Only one (victim or infection rate) was provided, not both. |  |  |
| **Rate and degree of damage** | Reader can fully understand the degree of damage. | Reader can somewhat understand the degree of damage. Details are missing. | Reader is confused about degree of damage. |  |  |
| **Where it is most likely to be found and how is it spread** | Reader can fully understand where it is found and how it is spread. | Reader can somewhat understand where it is found and how it is spread. Details are missing. | Reader is confused about where it is found and how it is spread. |  |  |
| **Most effective weapons against the germ** | Reader feels a bit safer knowing there are possible cures. If there is NO cure, include preventative measures. | Not clear about cures or prevention; Not in understandable terms. | Reader not sure if there are possible cures. |  |  |
| **Bibliography** | Has at least 3 sources listed. Easy to read and verify source information. | Has only 1 or 2 sources. | Sources written on scrap paper. Have sources such as Google or Yahoo. |  |  |
| **Other identifying characteristics** | Included & Creative | Included | Not scientifically based |  |  |
| **Total Points** |  | | | |  |