

Name: \_\_\_\_\_

## Science 24 Disease Research Project

*hand in this marking sheet when complete*

### Communicable Disease

Pick any communicable disease that you want to research. Ideas include: Hepatitis A virus, influenza, HIV, polio, rabies, west nile, *E.coli*, African sleeping sickness (the Tryps or African trypanosomiasis), Ascariasis, pneumonia, botulism, Bubonic plague, malaria, beaver fever from *Giardia*, rabies, toxoplasmosis, tuberculosis, athlete's foot, meningitis.

#### Content:

1. Title page with name of disease and picture of the pathogen  
Note: must be appropriate, no explicit photos
2. What type of pathogen is it? (virus, bacteria, protist, fungi?)
3. How can you get the pathogen? (airborne, waterborne, mosquito bite?)
4. How does the pathogen reproduce? (make more of itself?)
  - a. Explain.
5. How does the pathogen harm the human body?
  - a. What are the different side effects of the pathogen?
  - b. Explain.
6. Who is most likely to get the disease?
  - a. Why?
7. In what countries is the disease most common?
  - a. Why?
  - b. Include a map showing the distribution around the world
8. Healing:
  - a. Is there a treatment or cure?
  - b. Is there a vaccination against the disease?

#### Presentation:

9. Neatness and visual appeal (extra pictures, nice colour, good organization)
10. Clearly communicated (easy to read with few errors, good grammar spelling and punctuation, makes sense)

/ 18 marks

## Non-Communicable Disease

Pick any non-communicable disease that you want to research. Ideas include: cancer, diabetes type I, diabetes type II, heart disease, stroke, hypertension, osteoporosis, Alzheimer's, fibromyalgia, epilepsy, Crohn's, asthma, fetal alcohol syndrome, muscular dystrophy, sickle-cell anemia, hemophilia, anorexia nervosa, depression, bipolar disorder, irritable bowel syndrome

### Content:

11. Title page with name of disease and picture of the disease  
Note: must be appropriate
12. What causes it? (environmental or genetic?)
  - a. Explain.  
<http://www.just-health.net/Non-Communicable-Diseases-List.html>
13. Describe how the pathogen harms the human body
  - a. What are the different symptoms?
  - b. Explain.
14. Who is most likely to get the disease?
  - a. Why?
15. What percentage of people have this disease in Canada/North America? (example: one out of four people have it)
16. Impact on society:
  - a. how does this disease influence society? (For example, we are all aware of breast cancer and often fundraise for research to cure it)
17. Healing:
  - a. Is there a treatment or cure?
  - b. Explain.
18. Prevention:
  - a. How can this disease be prevented?
  - b. What actions can people take to avoid this disease?  
(For example, Tay Sach's is a lethal disease that is genetic and causes children to die painfully. People who carry the Tay Sach's gene get tested to see if their spouse has it too before they decide to have children)

### Presentation:

19. Neatness and visual appeal (extra pictures, nice colour, good organization)
20. Clearly communicated (easy to read with few errors, good grammar spelling and punctuation, makes sense)

/ 18 marks

TOTAL = / 26 marks