

Pre-AP Biology: Virus Project

This project is **due** at the **beginning of class** on: _____

This project will count as a **SUMMATIVE GRADE**.

Below is a list of viruses you should become familiar with. Choose which virus you wish to research

HIV	Adenovirus	Rabies
Ebola	Influenza	Smallpox
Hepatitis A, B <u>or</u> C	Polio	Others by request :-)

OBJECTIVE: You will become an expert on this virus by researching, creating a model, and present your findings to the class.

RESEARCH: research your virus using reliable sources. Use the questions below to guide your research. Information resources could include: websites, scientific articles, library databases, and textbooks.

Some reliable websites include:

Center for disease control: www.cdc.gov/

Any websites that end with “.gov” or “.edu”

(DO NOT use websites that end with anything else: .com, .org, .net, etc (no wikipedia!!!))

Address the following items in your report:

- Where/how/when did the virus originate? Provide geographies and dates.
- Who are its hosts? What types of organisms/populations can be infected with this virus?
- How is the virus transmitted?
- What symptoms are experienced by the host?
- Where is the virus prevalent today?
- Are there any preventative measures or treatments for contracting the virus?
- An illustration (picture or drawing) of the virus
- Anything else you found that was interesting
- **BIBLIOGRAPHY:** list all the sources of information you used for your report (websites, textbooks, articles, etc...). You must use AT LEAST 2 different sources.

☺ You are encouraged to *share resources* with your colleagues who are researching the same virus

DRAWING or MODEL: You will need to produce a drawing or a model of the virus. (Either one **NOT** both). If you choose the drawing, it needs to be neat, colored and labeled. Your labeling must include the type of genetic material your virus has. **Title** your drawing or model with the type/SHAPE of virus, its name, and the disease it causes. (Example: Human Immunodeficiency Virus: A Spherical RNA Retrovirus that causes AIDS). If you choose the model, **do NOT spend a lot of money on this project**. Recycled materials sometimes make the most creative projects. Remember, to specify the shape of your virus (spherical, helical, binal, polyhedral, or filovirus). Make sure your drawing or model reflects the appropriate shape and components—all must clearly show and have labeled the nucleic acid (either DNA or RNA) and the capsid. Depending on the shape you may have other parts, too.

REPORT: Type or neatly handwrite your research information on a separate sheet of paper. Be sure your report includes:

- Your name, date, teacher, and class period
- Is attached to your model/drawing
- The title of the report matches the title of your drawing/model as described above
- All research questions have been answered
- a BIBLIOGRAPHY: list all the sources of information you used for your report (websites, textbooks, articles, etc...). You must use AT LEAST 2 different reliable sources

**** Please listen closely in class for more specific verbal instructions! ***You are responsible for all information given for this project!!!! Must be school appropriate material!***

GRADING RUBRIC

Item	Possible Points
MODEL (30 points)	
Title	5
Accuracy	5
Shape specified	5
Components represented	5
Accuracy, Neatness, Creativity	10
REPORT (55 points)	
Historical Information: When, where, how did the virus originate?	15
Host organisms/populations	5
Transmission	5
Symptoms of infection	5
Prevention/Treatments	5
Present prevalence: geography, populations	10
Accuracy, neatness	10
CLASSROOM PRESENTATION: clear communication / Q&A	15