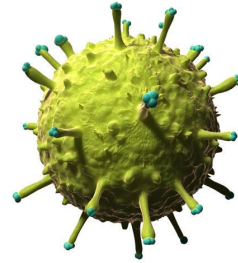


Virus Model Project

Working alone or in pairs you will research a virus and the disease it causes. You will create a 3D model and information sheet to display in class.

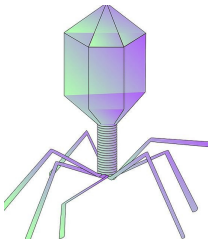
Model

- Supplies: A variety of materials for embellishing your model are available in class, you will need to provide your own base for the model (pool noodle, styrofoam ball, recycled materials, paper mache etc.)
- Your model must be able to hang from the ceiling of the classroom.
- Include labels for the following structures:
 - Nucleic acid core and type (DNA or RNA)
 - Capsid
 - Envelope (if present)
 - Proteins (antigens)



Information Sheet

- Double sided 8½ x 11 minimum
- Hang below your virus
- Include pictures/images and the following information about your virus
 - Name of virus
 - Disease it causes
 - Symptoms
 - How is the virus transmitted between hosts, virulence, prevention
 - What species/tissues/cells does the virus attack and how does it attach and enter
 - Treatments available for disease/symptoms
 - Other information...
- References used (minimum 3) APA style citation (www.citethisforme.com)



Assessment

You will be given a grade out of 35 divided as follows:

- Model /15
- Info card /15
- Walk about /5

Resources

Some websites on virus structure that may help you are:

- Molecular Expressions: <http://micro.magnet.fsu.edu/cells/virus.html>
- Microbiology & Immunology: <http://www-micro.msb.le.ac.uk/109/structure.html>
- Principles of Virus Architecture: <http://web.uct.ac.za/depts/mmi/stannard/virarch.html>
- Virus Structure: <http://www.tulane.edu/~dmsander/WWW/224/Structure224.html>
- Picture Book of Viruses: http://www.virology.net/Big_Virology/BVFamilyGenome.html
- Biological Diversity: http://www.emc.maricopa.edu/faculty/farabee/BIOBK/BioBookDiversity_1.html

Virus/Viral Disease List (You may choose a virus not on this list)

List of known viruses here: https://en.wikipedia.org/wiki/List_of_virus_species

AIDS – HIV	Marburg Hemorrhagic Fever
Avian Flu – H5N1	Molluscum contagiosum virus
Barley yellow dwarf luteovirus	Myxoma virus
Cervical Cancer/Genital Warts – HPV	Orf – Orf Virus
Chicken Pox	Pharyngoconjunctival Fever – Adenovirus
Cold – Rhinovirus	Plum pox virus
Coxsackie Virus	Polio
Cytomegalovirus	Rabies
Dengue Fever	Roseola infantum – Herpesvirus 6
Eastern equine encephalitis virus	Rubella
Ebola	SARS
Feline Leukemia Virus	Simian retrovirus
Gastroenteritis – Norwalk	Slapped Cheek Disease – Parvovirus
Gastroenteritis – Rotavirus	Small Pox
Hand-Foot-Mouth Disease	Swine Flu - H1N1
Hantavirus	Tobacco Mosaic Virus
Hepatitis A	Tomato spotted wilt virus
Hepatitis B	Temporal Lobe Encephalitis – HSV-1 Herpesvirus
Hepatitis C	T4 Bacteriophage
Genital Herpes	Variola Virus
Influenza	Varicella Virus
Lassa Hemorrhagic Fever	West Nile Virus
Maize streak mastrevirus	Yellow Fever
Measels	Zika Virus
Mononucleosis – Epstein Barr Virus	

Topic:_____

Partner:_____

Project Due Date:_____