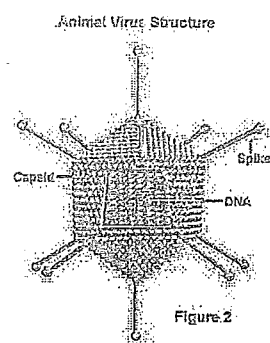
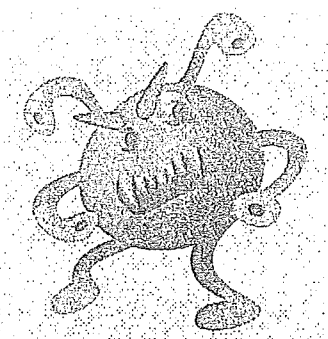


Virus Model Project



Working individually, you will choose a virus from the list. Research the virus and the disease it causes. You will create a 3D model of your virus and provide information about the virus.

Model:

1. Create a model that demonstrates an accurate representation of your virus. Build into your project a method of hanging your model from the ceiling of the classroom.
2. On your model, you must include and label the following:
 - a. Nucleic acid core and type (DNA or RNA)
 - b. Capsid
 - c. Lipid envelope (if your virus has one)
 - d. Capsid proteins (antigens)

Virus Description:

1. In point form, provide the following information about the virus that will hang below your virus:
 - a. Name of the virus
 - b. Name of the disease it causes
 - c. Symptoms of the disease
 - d. How the virus is transmitted & methods to prevent transmission
 - e. Level of virulence (ie, is it transmitted easily?)
 - f. Treatment for the disease and its success rate
2. You must also include a list of all the references you used!!

The internet is a great place to start. Here are some websites to get you going:

Principles of Virus Architecture: <http://web.uct.ac.za/depts/mmi/stannard/virarch.html>

Book of Viruses: http://www.virology.net/Big_Virology/BVFamilyGenome.html

Biological Diversity: http://www.emc.maricopa.edu/faculty/farabee/BIOBK/BioBookDiversity_1.html

Evaluation:

- Your model must represent the virus chosen and should demonstrate the basic parts of a virus.
 - Use of appropriate color and materials
 - Labelling of parts
- Creativity/Originality
- Description must be an accurate and relevant to your chosen virus.
 - Each piece of information above
- List of references must be included – a project without references will not be marked!
 - List of references from at least 3 different sources

Virus List

AIDS – Human Immunodeficiency Virus
Cervical Cancer – Papovirus
Chickenpox – herpes virus
Dengue Fever – Flavivirus
Ebola – Filovirus
Gastroenteritis – Norwalk virus (Calicivirus)
Gastroenteritis – Rotavirus (Reovirus)
Hand-Foot-Mouth Disease – Picornavirus (Coxsackie A-16 virus)
Hepatitis A – Picornavirus
Hepatitis B – Hepadnavirus
Hepatitis C – Flavivirus
Hepatitis D – Deltavirus
Hepatitis E – Calcivirus
Genital Herpes – HSV – 2 Herpesvirus
Influenza A, B, C – Orthomyxovirus
Lassa Hemorrhagic Fever – Lassa Virus (Arenavirus)
Measles – Rubeola Virus (Paramyxovirus)
Mononucleosis – Epstein Barr Virus
Mumps – Mumps Virus (Paramyxovirus)
Marburg Hemorrhagic Fever – Marburg Virus (Filovirus)
Orf – Orfivirus (Poxvirus)
Pharyngoconjunctival Fever – Adenovirus 1, 2, 3 & 5
Polio – Poliovirus
Rabies – Rhabdovirus
Rubella – Togavirus
“Slapped Cheek” Disease (Erythmia Infectiosum) – Parvovirus B-19
Smallpox – Poxvirus
Temporal Lobe Encephalitis – HSV-1 Herpesvirus
Yellow Fever – Yellow Fever Virus