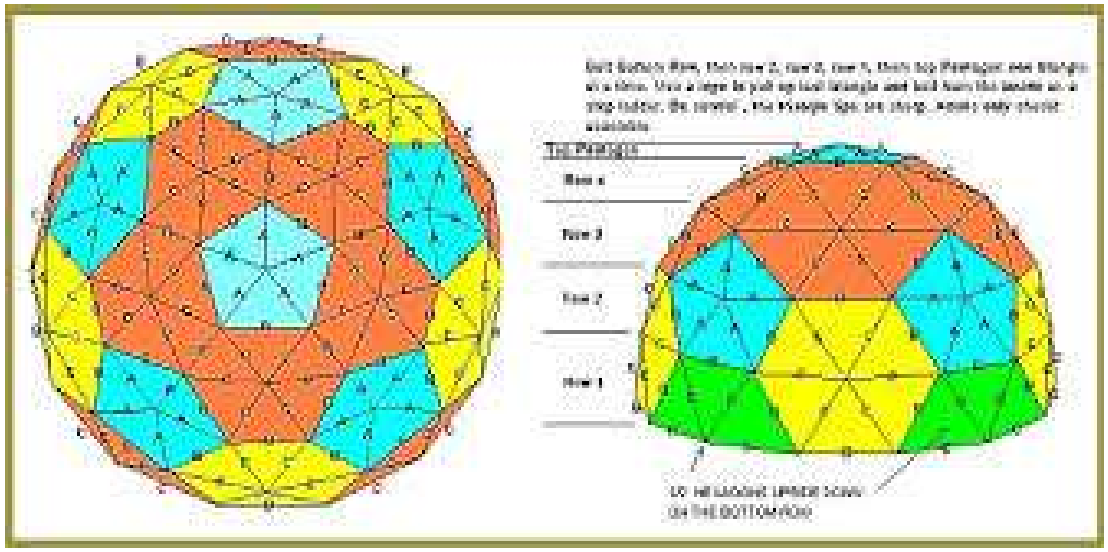
DIY ASSIGNMENT: “BUILD YOUR OWN VIRUS”



Guidelines:

- Model must represent a genus of plant viruses
- Must be to scale (include scale) (except for helix which only needs to show a portion)
- Must reflect the details of the virus architecture

  Diversity of cp subunits if more than one is present

  No. of cp subunits

  Any other aspects of the virion
- Must show the location of the coat protein subunits
- Must include something that represents the genome (to scale)

Guidelines Con't:

- Teams will be formed at random
- Teams will be assigned the type of structure at random

- Team will prepare a brief PowerPoint presentation describing the model and will present it to the class

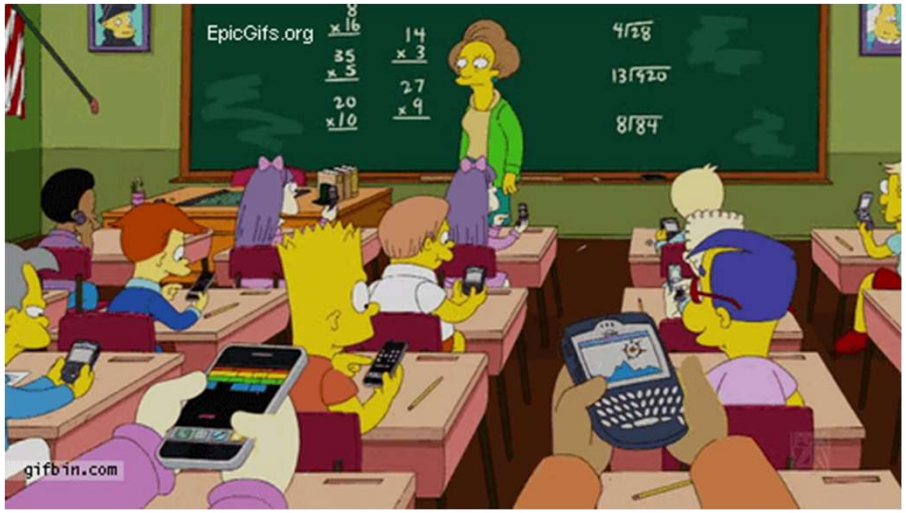
Presentation Should Include:

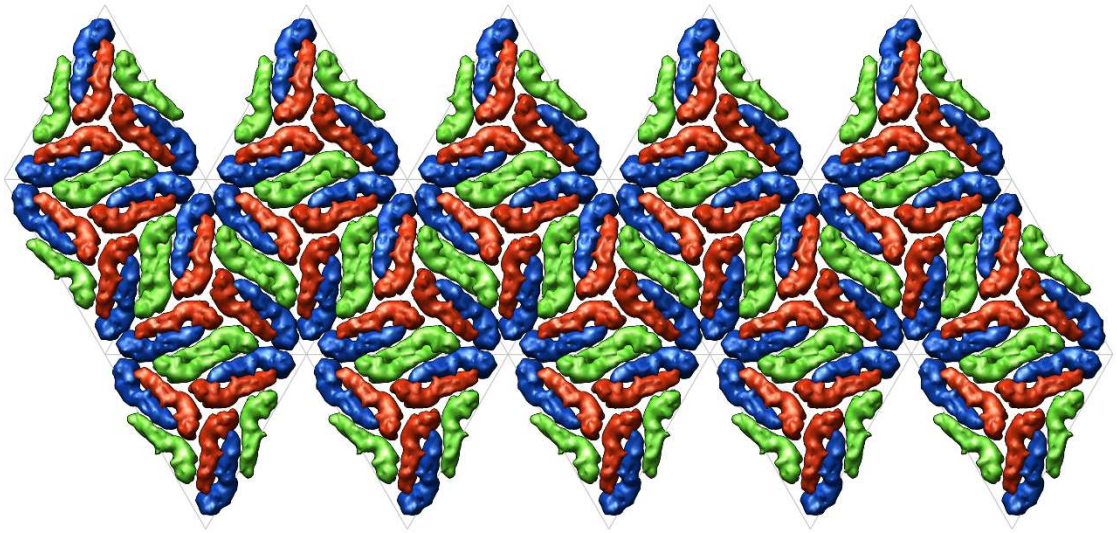
- The size (dimensions) of the particle and other relevant information
- The size of genome (nt), type and strandedness
- Family, genus, names of 3 virus species that are represented by the model

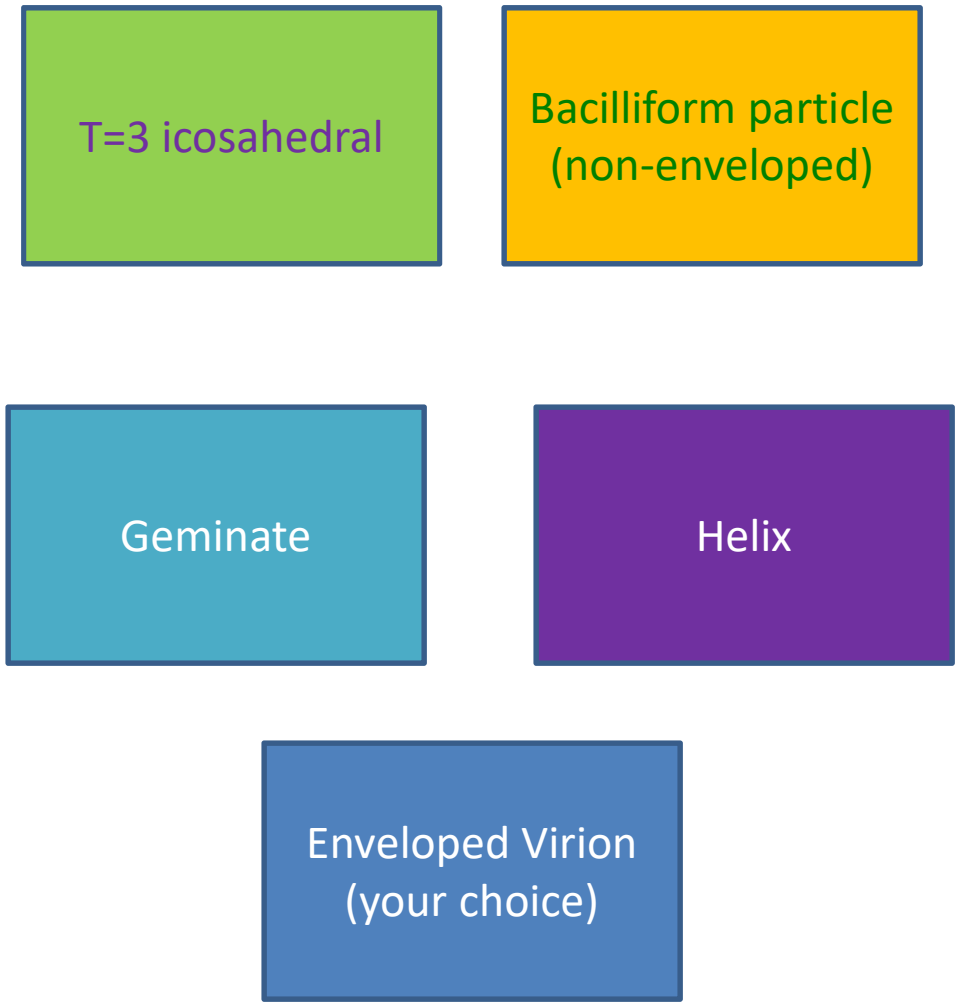
Evaluation:

- Each member of a team will receive the same no. of points
- Must demonstrate originality (didn't just copy and paste from an online virus model)
- The outcome must demonstrate that you have gained a greater understanding of virus architecture from this exercise
- Model will be judged for accuracy and inclusion of specific details of the structure

There are many examples on the Web of this assignment given to HS students – your assignment is designed to allow you to produce a much higher caliber model.






T=3 icosahedral
Bacilliform particle (non-enveloped)
Geminate
Helix
Enveloped Virion (your choice)