Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_

Virus and Bacteria Modeling Worksheet

1. Can one strain of virus infect both plants and animals? Use your information guide to help you answer this question.
2. After the name of each virus, place an X if it affects plants, animal, or bacteria.

|  |  |  |  |
| --- | --- | --- | --- |
| Virus Name | Plants | Animal | Bacteria |
| Tobacco mosaic |  |  |  |
| Adenovirus  |  |  |  |
| Bacteriophage |  |  |  |

1. Name the specific organisms each virus affects.

|  |  |
| --- | --- |
| Virus | Organism(s) affected |
| Tobacco mosaic |  |
| Adenovirus |  |
| Bacteriophage |  |

1. Compare your models to the diagram of the models shown. For each model determine what the parts listed below represent.

Virus model

|  |  |  |
| --- | --- | --- |
| Virus | Part on Model | Represents |
| Tobacco mosaic | Outer layer of the pink beads |  |
| Adenovirus | Pins and Sytrofoam ball |  |
| Bacteriophage | Bead |  |

1. Compare your bacteria model to the diagram of the model shown. Provide the color of clay you used to represent each part of the bacteria.

Bacteria model

|  |  |
| --- | --- |
| Color of Clay | Represents |
|  | Cell Wall |
|  | Cell Membrane |
|  | DNA |
|  | Ribosomes |

1. Which nucleic acid does each virus contain?

|  |  |
| --- | --- |
| Virus | Contains RNA or DNA? |
| Tobacco mosaic |  |
| Adenovirus |  |
| Bacteriophage |  |

1. Make a Venn Diagram comparing the structure of a bacteria to the structure of a virus