

To: Bunny Jaskot
From: Linda Hodges, California
Re: OBTA Share-a-Thon

ELVIRUS, INFECTOR OF THE DARK!!!!



CONCEPT: Basic Steps of Viral Infection

OBJECTIVE: An activity to initiate student interest and demonstrate the Lytic Cycle of a Virus.

MATERIALS: balloon, glue, straight pins, confetti or similar pieces of paper, transparent tape, funnel

PROCEDURE: Prior to class prepare the following:

Before inflation and using the funnel, pour some confetti, which represents virus particles, into the balloon. Inflate the balloon and tie it to maintain inflation. Place a small piece of transparent tape on the balloon near the tied end where it is more pliable. The balloon represents the cell to be infected.

Glue two pieces of colorful, round confetti on the head of a straight pin; this represents the infecting virus. Another straight pin should be hidden in your hand during the demonstration.

Begin your demonstration as an effective dramatization for the **LYTIC CYCLE**. Hold up the balloon which represents the cell about to become the host to a virus. Show students the infecting virus (the pin with the paper head). Then carefully insert the pin into the balloon through the place covered with transparent tape. This will prevent the balloon from bursting. Leave the virus pin in place in the balloon.

Explain that the virus injects its DNA or RNA into the cell, takes over the host cell's replicating machinery, and replicates and assembles new virus particles until the host cell **BURSTS** (lysis) and releases the newly formed virus particles which will infect more healthy cells.

CAUTION: As you perform the following step, be sure to hold the head of the paper-covered pin so that it does not become a missile.

Burst the balloon (cell) with the pin hidden in your hand. This will cause the confetti (virus particles) to fly out, demonstrating lysis.

This activity may be followed by a more detailed explanation of the Lytic and Lysogenic Cycles of viruses, as well as, activities to reinforce the information. It is an introduction to any topics related to viruses.