

### The History of Viruses / Virology

the first written record of a virus infection consists of a hieroglyph from Memphis, the capital of ancient Egypt, drawn in approximately \_\_\_\_\_, which depicts a temple priest called **Ruma** showing typical clinical signs of \_\_\_\_\_

**variolation** involved \_\_\_\_\_

**Smallpox** In the late \_\_\_\_\_ observed and studied Miss Sarah Nelmes, a milkmaid who had previously caught \_\_\_\_\_ and was subsequently found to be immune to \_\_\_\_\_

On 14th May 1796, **Edward Jenner** used cowpox-infected material obtained from the hand of Sarah Nemes, a milkmaid from his home village of Berkley in Gloucestershire to successfully vaccinate \_\_\_\_\_

On 1st July 1796, Jenner challenged the boy by \_\_\_\_\_  
**He did not become** \_\_\_\_\_ - !!!

Jenner developed the \_\_\_\_\_, based on these findings, and smallpox is currently all but wiped out.

**Koch's Postulates** which are still generally regarded as the \_\_\_\_\_ is responsible for a specific disease:

- The agent must be \_\_\_\_\_.
- The agent must be \_\_\_\_\_.
- The disease must be reproduced when a \_\_\_\_\_ of the agent is inoculated into a \_\_\_\_\_.
- The same agent must be \_\_\_\_\_ once again from the experimentally \_\_\_\_\_.

### Viruses: The Basics

What are the "requirements" for life?

Are viruses alive?

- Most virologists consider them \_\_\_\_\_.
- They are similar to \_\_\_\_\_ as they lack the means for self-reproduction outside a host cell, but unlike parasites, viruses are generally not considered to be true living organisms.
- For those who consider viruses living, \_\_\_\_\_.
- A **virus** is a microscopic \_\_\_\_\_.
- Viruses can only replicate themselves by \_\_\_\_\_.
- At the most basic level, viruses consist of \_\_\_\_\_.
- They infect a wide variety of organisms: both \_\_\_\_\_.
- A virus that infects bacteria is known as a \_\_\_\_\_, often shortened to \_\_\_\_\_.
- The study of viruses is known as virology, and those who study viruses are known as virologists.