

Activity 4: Virtual Digest of Phage Genomes Answer Key

Q1 and Q2 : For full credit students should combine the images into one coherent image in powerpoint etc and label images clearly with Phage names and Enzyme names to generate a concise figure.

Q3. Answers will vary. But the main focus should be on crafting an inference, and possible references to at least some bands that are similar/ differently spaced with the same restriction enzyme in different Phages. Although most of these digests will produce numerous bands, it is also possible to comment on number of fragments produced.

Q4. The key concept in a successful response should reflect that restriction digests only provide snapshot of the genome and there might be key differences in the Phage genome sequences that can only be captured via sequencing analysis.

Q5. All of this data can be retrieved from Phages DB, from the specific page of the Phage. Students could submit the responses in another figure format or a descriptive format.