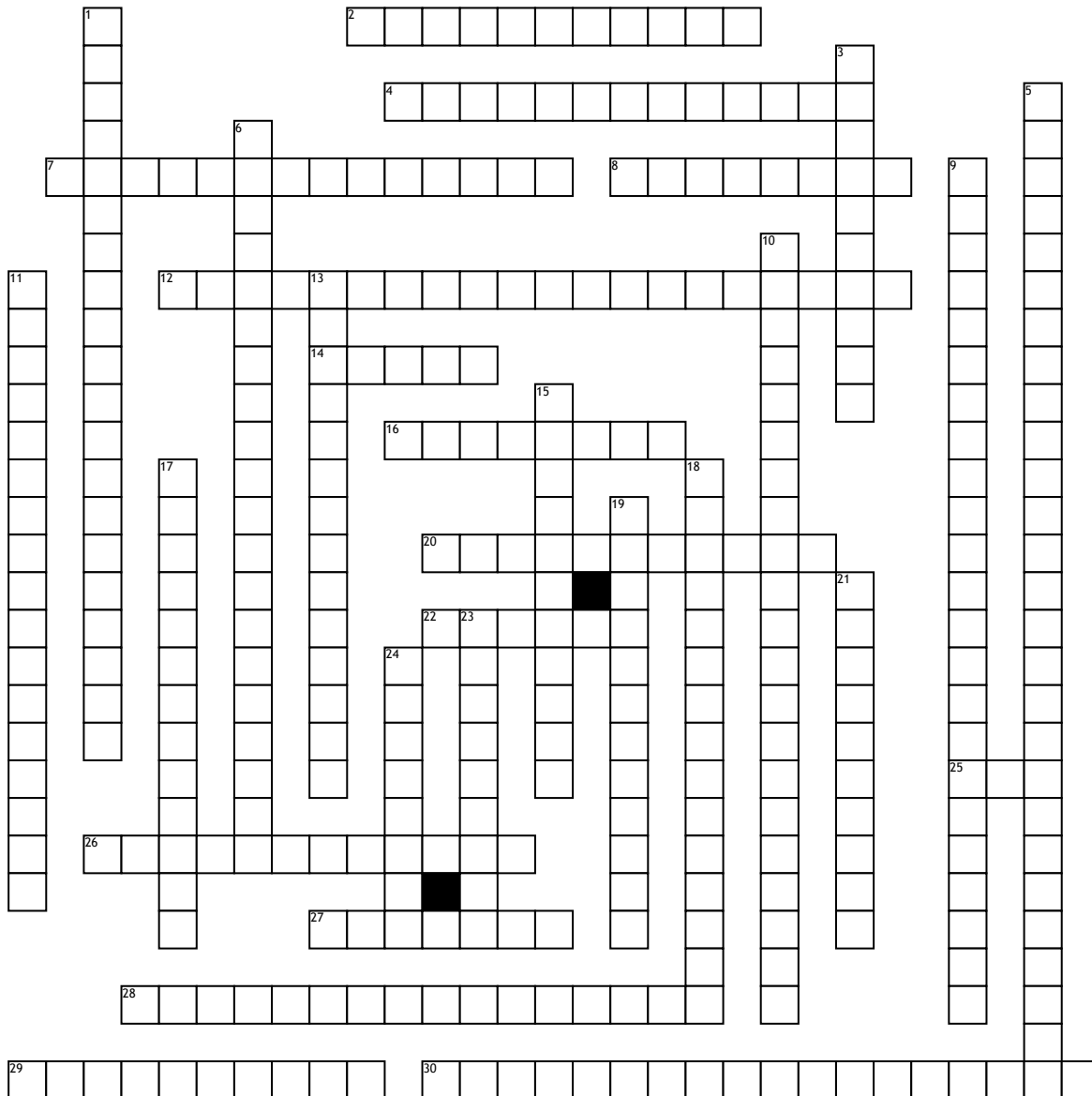


The Influenza Virus



Across

2. The shape of the Influenza virus is known to be _____
4. This is present in multiple copies in the membrane envelope of the influenza virus _____
7. The errors created during the replication cycle will allow the influenza virus to become resistant to _____ by the antibodies from the host
8. This is the site of influenza virus assembly _____
12. This is what hemagglutinin uses on influenza virus particles to make it readily recognized by host antibodies when the influenza virus infects the host _____
14. How many types of the influenza viruses infect humans _____
16. Due to not having a sufficient degree of _____, new influenza virus strains are always circulating and come back year after year
20. Two ways that one can be exposed to the influenza virus is through natural infection or _____
22. What time of the year does this virus peak in terms of spreading _____
25. Multiple of these make up the genomes of the influenza viruses. They are single-stranded and negative-sense _____

26. This is the process for when there is a change that results when one gene segment of the circulating influenza virus is replaced with another gene segment _____
27. Where is viral transcription and replication carried out in the infected host cell _____
28. During what cycle does the viral-specific RNA polymerase make a high frequency of errors in its synthesis of viral RNAs. The errors created during this cycle will create a lot of variations of the Hemagglutinin glycoprotein _____
29. Viral infection is initiated when a virion binds to cell surface receptors that contain this _____
30. When attempting to develop antivirals to attack the influenza virus RNA polymerase, the focus has been on this Polymerase Basic One _____

Down

1. This is what Hemagglutinin is _____
3. Which strain of the influenza virus has a reservoir in pigs and birds _____
5. This protein is a surface glycoprotein in the influenza C virus strain _____
6. Subtypes and lineages of the influenza virus are based on this _____

9. After the viral and endosomal membranes fuse together, these are released into the cytoplasm and then transported into the nucleus _____
10. The influenza virus affect this in humans _____
11. In 1918, this pandemic occurs and remains in history as the worst outbreak of infectious disease _____
13. This is when there are changes in the hemagglutinin glycoproteins _____
15. This is caused when the haemagglutinin proteins or the haemagglutinin-esterase-fusion bind to sialic acid _____
17. What receptor-cleaving proteins release new viruses from the cell surface after they are assembled _____
18. What taxonomy family is the influenza virus associated with _____
19. Hemagglutinin plays a key role in what pathway for the influenza virus _____
21. Which stain of the influenza virus is mostly seen in children _____
23. This is what the word "influenza" means in the Italian language, which is also where it originated from _____
24. What is caused due to the adaptation of new Influenza A strains in humans _____