

**THE DNA DOUBLE HELIX DISCOVERY (17:08)**

**NAME:** \_\_\_\_\_

(HHMI BioInteractive Video – You Tube)

- 1) The challenge of trying to discover how heredity was transferred was taken up in \_\_\_\_\_, by \_\_\_\_\_ unknown scientists.
- 2) They met at the Cavendish laboratory in \_\_\_\_\_, \_\_\_\_\_.
- 3) James Watson was a \_\_\_\_\_ year old \_\_\_\_\_.
- 4) The other scientist was an Englishman named \_\_\_\_\_, who was an academic \_\_\_\_\_.
- 5) They joined forces after World War II, in \_\_\_\_\_.
- 6) The idea of genes dates back to \_\_\_\_\_ experiments with pea plants in the \_\_\_\_\_.
- 7) By the 1920's, genes were located in \_\_\_\_\_.
- 8) \_\_\_\_\_ were made up of proteins and DNA.
- 9) Watson and Crick were originally trying to find out if chromosomes were made of \_\_\_\_\_ or \_\_\_\_\_.
- 10) DNA is a \_\_\_\_\_, linked to a \_\_\_\_\_, and \_\_\_\_\_ bases.
- 11) \_\_\_\_\_ showed that \_\_\_\_\_ can carry genetic information.
- 12) A powerful technique for solving molecular structure was \_\_\_\_\_.
- 13) The picture from X-ray crystallography is called a \_\_\_\_\_.
- 14) DNA is like \_\_\_\_\_, it is hard to work with and analyze.
- 15) Why didn't Watson and Crick use X-ray crystallography?  
\_\_\_\_\_
- 16) \_\_\_\_\_ was a talented crystallographer.
- 17) It was a period in time when it was \_\_\_\_\_ for a woman to study science.
- 18) London is \_\_\_\_\_ miles from \_\_\_\_\_.
- 19) Watson and Crick's first DNA model had \_\_\_\_\_ sugar phosphate chains on the inside, and the \_\_\_\_\_ were sticking on the outside of the model.
- 20) Rosalind \_\_\_\_\_ mocked the \_\_\_\_\_ helix model.
- 21) The most famous image in all of biology was Franklin's \_\_\_\_\_.
- 22) Chargaff analyzed the \_\_\_\_\_ composition of DNA in different species.
- 23) He found that the amount of \_\_\_\_\_ (adenine) and \_\_\_\_\_ (thymine) were always the same, and that the amount of \_\_\_\_\_ (cytosine) and \_\_\_\_\_ (guanine) were always the \_\_\_\_\_.
- 24) The arrangement of the \_\_\_\_\_, immediately revealed how \_\_\_\_\_ works.
- 25) The structure revealed how \_\_\_\_\_ information is stored, and how changes or \_\_\_\_\_ happen.
- 26) The structure of the DNA \_\_\_\_\_ helix was reported in the Journal \_\_\_\_\_.
- 27) \_\_\_\_\_ years later the scientists were awarded the \_\_\_\_\_ prize.