

Name _____

Date _____ Period _____

DNA – Who Discovered What!?!?When!?!?!?!?

1. Oswald Avery – 1944 Proves that DNA carries genetic material. Suggested that DNA might be the gene and not the protein
2. Linus Pauling – 1948 Discovered that proteins take the shape of an alpha helix which spirals like a spring. Gave a clue as to the shape of DNA
3. Erwin Chargaff – 1950 Discovered that the bases in DNA always pair the same way and made the base pairing rule: A=T and C=G
4. Rosalind Franklin – 1951 Used x-ray crystallography to examine DNA fibers and concluded that DNA was some sort of helix
5. Maurice Wilkins – Also 1951 – Helped Franklin – received credit for her work, but she took the picture.
6. Al Hershey & Martha Chase 1952 Proved that DNA is the genetic material in cells.
7. James Watson & Francis Crick – 1953 – at Cambridge University in London...
Were using the work of Linus Pauling to make physical structures of DNA.
Chargaff's base pair rule and Franklin's picture helped finish the final structure
8. 1962 Nobel Prize in Medicine was awarded to:
James Watson, Francis Crick, and Maurice Wilkins (yes, even though it was Franklins's work) for discovering the molecular structure of DNA.

The basic functions of DNA are:

1. to reproduce an exact replica of itself during cell division
and pass the hereditary information from generation to generation.
2. to direct and control protein synthesis in a cell.

"A" goes with T

"C" goes with G