



ACROSS

- 1 _____ triphosphate is a multifunctional nucleotide that is most important as a molecular currency of intracellular energy transfer.
- 4 The pyrimidine _____ base pairs with adenine in RNA and is replaced by thymine in DNA
- 6 _____ is a nucleic acid that contains the genetic instructions used in the development and functioning of all known living organisms.
- 10 _____ is one of the five main nucleobases found in the nucleic acids DNA and RNA. It is a pyrimidine derivative. In Watson-Crick base pairing, it forms three hydrogen bonds with guanine.
- 11 _____ RNA (abbreviated tRNA) is a small RNA chain that transfers a specific amino acid to a growing polypeptide chain at the ribosomal site of protein synthesis during translation.
- 15 _____ is one of the five main nucleobases found in the nucleic acids DNA and RNA. In base-pairing it binds to cytosine through three hydrogen bonds.
- 16 _____ RNA (rRNA), a type of RNA synthesized in the nucleolus, is the central component of the ribosome, the protein manufacturing machinery of all living cells.
- 17 _____s are the parts of RNA and DNA that may be involved in pairing. These include cytosine, guanine, adenine, thymine, uracil, xanthine and hypoxanthine.
- 19 _____ is one of the four bases in the nucleic acid of DNA along with adenine, guanine, and cytosine. It always base-pairs with adenine.
- 20 _____ is a nucleoside composed of adenine attached to a ribose moiety via a beta-N9-glycosidic bond.

DOWN

- 2 A _____ is a chemical compound that consists of 3 portions: a heterocyclic base, a sugar, and one or more phosphate groups.
- 3 _____ is a purine with a variety of roles in biochemistry including cellular respiration, as part of ATP, NAD, and FAD, and protein synthesis, as a chemical component of DNA and RNA
- 5 _____ is a heterocyclic aromatic organic compound, consisting of a pyrimidine ring fused to an imidazole ring.
- 7 _____ is a heterocyclic aromatic organic compound similar to benzene and pyridine, containing two nitrogen atoms at positions 1 and 3 of the six-member ring
- 8 Ribonucleic acid or _____ is a nucleic acid polymer consisting of nucleotide monomers, which plays a number of important roles in the processes of translating genetic information from DNA into proteins.
- 9 _____ is the complex of DNA and protein that makes up chromosomes
- 12 _____s are the chief protein components of chromatin, acting as spools around which DNA winds, and playing a role in gene regulation.
- 13 _____s are glycosylamines made by attaching a nucleobase to a ribose or deoxyribose ring.
- 14 _____ Ribonucleic Acid (mRNA) is a molecule of RNA encoding a chemical blueprint for a protein product.
- 18 Two nucleotides on opposite complementary DNA or RNA strands that are connected via hydrogen bonds are called a _____ pair.