

BIOLOGICAL TERMS: PAPER 2

Give the correct biological term for the following descriptions.

DESCRIPTIONS	BIOLOGICAL TERM
1. An allele that does not influence the phenotype when found in the heterozygous condition.	Recessive allele
2. The position of a gene on a chromosome.	Locus
3. The physical and functional expression of a gene.	Phenotype
4. Chromosomes that are not responsible for sex determination.	Autosomes
5. The process of finding a desirable gene, isolating it and then moving it into the cells of another organisms.	Genetic modification
6. The two parts of a chromosome held together by a centromere.	Chromatids
7. A section of a DNA molecule that codes for a specific characteristic.	Gene
8. The production of genetically identical copy of an organism using biotechnology.	Cloning
9. The deliberate breeding of organisms for desirable characteristics selected by humans.	Artificial selection/ selective breeding
10. The explanation that species experience long periods without physical change, followed by short periods of rapid physical change.	Punctuated equilibrium
11. The phase of meiosis during which homologous chromosomes separate and start moving towards opposite poles.	Anaphase I
12. The defect in cell division that leads to Down syndrome.	Non-disjunction
13. The structure that is made up of two chromatids joined by a centromere.	Chromosome
14. An explanation for something that has been observed in nature and which can be supported by facts, laws and tested hypotheses.	Theory
15. Similar structures on different organisms that suggest they have a common ancestor.	Homologous structures
16. The complete set of chromosomes in the cell of an organism.	karyotype
17. A bar code pattern formed from DNA.	DNA Profiling
19. The bonds formed between amino acids.	Peptide bonds
20. A representation of the number, shape and arrangement of all the chromosomes in the nucleus of a somatic cell.	Karyotype
21. Openings in the nuclear membrane that allow mRNA to leave the nucleus.	Nuclear pores
22. A tentative explanation of a phenomenon that can be tested.	Hypothesis
23. The distribution of species in different parts of the world.	Biogeography
24. Chromosomes that carry the same set of genes.	Homologous chromosomes
25. Two or more alternative forms of a gene at the same locus.	Allele
26. The structure responsible for pulling chromosomes to the poles of an animal cell during cell division.	Spindle fibres
27. A phase in the cell cycle that occurs before cell division.	Interphase
28. A diagrammatic representation showing possible evolutionary relationships among different species.	Phylogenetic diagram/ Cladogram
29. The type of vision shared by apes and humans that allows for depth perception.	Binocular vision
30. A genetic cross involving two characteristics.	Dihybrid cross

31. A genetic disorder characterised by the absence of a blood-clotting factor.	Haemophilia
32. The present –day distribution of organisms.	Biogeography
33. A nucleic acid that carries amino acids to the ribosome for protein synthesis.	tRNA
34. The natural shape of a DNA molecule.	Double helix
35. A section of DNA that codes for a specific protein.	Gene
36. Evolution with long periods of no change followed by short periods of rapid change.	Punctuated equilibrium
37. The sex chromosomes of an organism.	Gonosomes
38. Descent with modification over time.	Evolution
39. A group of organisms of the same species in a specific habitat.	Population
40. The family to which humans belong.	Hominidae
41. A human disorder caused by a non-disjunction of chromosome pair 21.	Down syndrome
42. The stage of protein synthesis during which mRNA forms from DNA.	Transcription
43. The type of variation in a population with no intermediate phenotypes.	Discontinuous variation
44. The type of inheritance where the dominant allele masks the expression of the recessive allele in the heterozygous state.	Complete dominance
45. The variety of life forms that exist on Earth.	Biodiversity
46. The opening in the skull through which the spinal cord enters.	Foramen magnum
47. A testable statement that can be rejected or accepted.	Hypothesis
48. Total disappearance of a species from Earth.	Extinction
49. A segment of a chromosome that codes for a particular characteristic.	Gene
50. The ability to walk on two limbs.	Bipedal
51. The organelle in the cytoplasm which is the site of protein synthesis.	Ribosomes
52. The name of the bond that forms between amino acids in a protein molecule.	Peptide bonds
53. The process by which a DNA molecule makes identical copies of itself.	DNA replication
54. The name of the process when homologous chromosome pairs fail to separate during meiosis.	Non-disjunction
55. The permanent disappearance of a species from earth.	Extinction
56. A testable statement that may be rejected or accepted.	Hypothesis
57. The type of nucleic acid that carries a specific amino acid.	tRNA
58. The selection and breeding of organisms with desirable characteristics by humans.	Artificial selection/ selective breeding
59. An allele that is not shown/expressed in the phenotype when found in the heterozygous condition.	Recessive allele
60. A sudden change in the sequence/order of nitrogenous bases of a nucleic acid.	mutation
61. Explanation of an observation that is supported by facts, models and laws.	Theory
62. The breeding of organisms over many generations in order to achieve a desirable phenotype.	Selective breeding
63. The type of sugar found in a RNA molecule.	Ribose
64. Type of evolution involving long periods of time when species do not change and short periods of rapid change.	Punctuated equilibrium

65. The hypothesis which supports migration of human ancestors from the point of origin.	Out of Africa Hypothesis
66. The mineralised remains of organisms that have lived in the past.	Fossils
67. The position of a gene on a chromosome.	locus
68. The genus of the fossil "Little Foot"	<i>Australopithecus</i>
69. A diagram showing the inheritance of genetic disorders over many generations.	Pedigree diagram
70. The bond that forms between amino acids.	Peptide bond
71. The phase in the cell cycle during which DNA replication occurs.	Interphase
72. The first <i>Homo</i> species to use tools	<i>Homo habilis</i>
73. Undifferentiated cells that develop into any type of cell.	Stem cells
74. A breeding process used for the domestication of plants and animals.	Selective breeding
75. Nitrogenous base found only in RNA molecules.	Uracil
76. The use of biological processes, organisms or systems to improve the quality of human life.	Biotechnology
77. Type of variation within a population in which there is a range of intermediate phenotypes.	Continuous variation
78. An upright posture and walking only on two legs.	Bipedalism
79. A sugar molecule found in a nucleotide of DNA.	Deoxyribose
80. Genetic disorder resulting in the abnormal clotting of blood.	Haemophilia
81. Study of fossils.	Palaeontology
82. Present-day distribution of living organisms across the continents.	Biogeography
83. Family to which humans belong.	Hominidae
84. The type of RNA containing anticodons.	tRNA
85. The process during which genetically identical organisms are formed using biotechnology.	Cloning
86. Undifferentiated animal cells that can form any type of tissue.	Stem cells
87. Type of inheritance where none of the two alleles is dominant over the other and an intermediate phenotype is produced.	Incomplete dominance
88. The breeding of organisms by humans to achieve a desirable phenotype.	Selective breeding/ Artificial selection
89. The point of crossing over between two adjacent chromosomes.	chiasmata
90. The organelle in a cell where translation occurs.	ribosomes
91. The variety of living organisms on Earth.	biodiversity
92. A diagrammatic representation of possible evolutionary relationships amongst species.	Phylogenetic diagram/ cladogram
93. The splitting of the cytoplasm during cell division.	cytokinesis
94. The process whereby DNA makes an exact copy of itself.	DNA Replication
95. A type of variation where there is a range of phenotypes for the same characteristic.	Continuous variation
96. The present-day distribution of living organisms.	Biogeography
97. The failure of chromosome pairs to separate during meiosis.	Non-disjunction
98. Similar structures in different species that show modification by descent.	Homologous structures
99. An individual having two non-identical alleles for a characteristic.	Heterozygous
100. A testable statement that may be accepted or rejected.	Hypothesis
101. The bonds between nitrogenous bases in a DNA molecule.	Hydrogen bonds
102. All the genes that make up an organism.	Genome
103. The type of evidence for human evolution that includes tool-making.	Cultural evidence
104. The process whereby new species are formed.	speciation

105. An inherited disorder where blood fails to clot properly.	Haemophilia
106. The opening at the base of the skull through which the spinal cord passes.	Foramen magnum
107. Two or more alternative forms of a gene at the same locus.	Allele
108. The type of variation in a population with no intermediate phenotypes.	Discontinuous variation
109. Chromosomes involved in sex determination.	Gonosomes
110. Type of inheritance where both alleles are expressed equally in the phenotype.	Co-dominance
111. The analysis of DNA samples to identify individuals that may be related.	DNA Profile
112. The sugar found in RNA	Ribose
113. The structure in an animal cell that forms spindle fibres.	Centrioles
114. Undifferentiated animal cells that can give rise to specialised cell types.	Stem cells
115. The division of the cytoplasm after a cell nucleus has divided.	Cytokinesis
116. A diagram representing possible evolutionary relationships between species.	Phylogenetic diagram / cladogram
117. The nitrogenous base found in messenger RNA but not in DNA.	Uracil
118. An explanation describing evolution as consisting of long phases of little change alternating with short phases of rapid change.	Punctuated equilibrium
119. The permanent disappearance of a species from Earth	Extinction
120. Genus to which Little Foot and Mrs Ples belongs	<i>Australopithecus</i>
121. The cell organelle to which mRNA attaches during protein synthesis	Ribosome
122. The position of a gene on a chromosome	Locus
123. The sugar that forms part of a nucleotide in RNA	Ribose
124. The use of living organisms and their biological processes to improve the quality of human life.	Biotechnology

