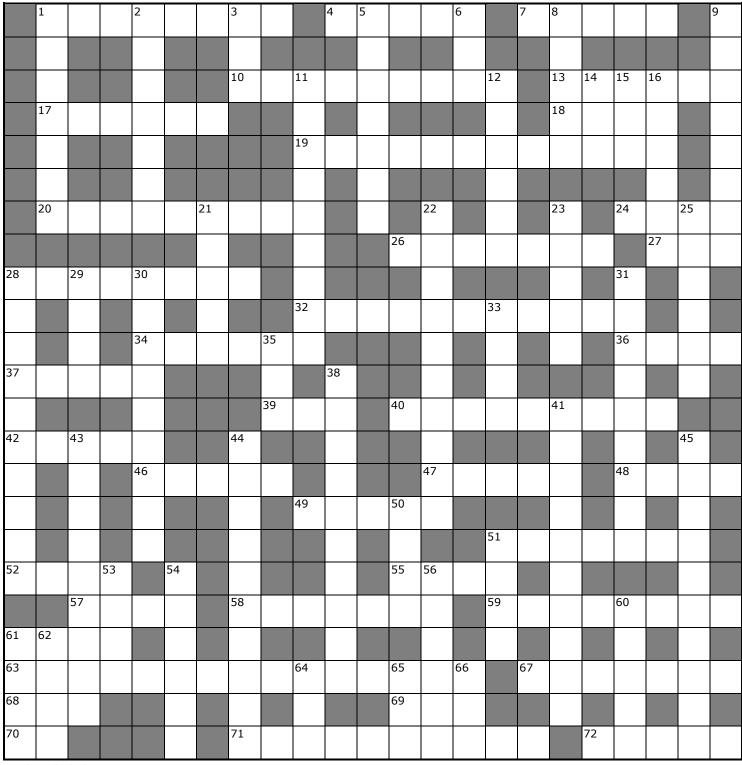
## **EVOLUTION / BIOLOGY CROSSWORD**

(Suggested for Year 12) by Ken Greatorex, Australian Skeptics



## ACROSS

1. An organism that lives for two years (usually refers to plants) [8]

4. & 7 across: The individual chemical units that are assembled in chains by ribosomes to form proteins (two words: [5], [5])

7. See 4 across

10. An organism that generates its own heat to maintain its body temperature; a warm-blooded animal [9]

13. An enzyme, produced in the stomach, that in the presence of hydrochloric acid splits helps to digest proteins [6]

17. An organism that lives for one year only (usually refers to plants) [6]

18. Compass point [4]

19. Organelles in the cytoplasm of cells that provide energy in the form of ATP [12]

20. A theory that explains the origin and development of species on earth; the process of speciation; a gradual change in a group of living things [9]

24. A flat circular object [4]

26. In evolutionary terms, the degree to which an organism is able to survive selective pressures in its environment in order to produce viable offspring [7]

27. Coded distress signal [3]

28. A chromosome which is not involved in sex determination [8]

32. The kind of evolution that produces similar characteristics in unrelated species due to similar environmental stresses; e.g: thorns on a rose and spines on a cactus [11]

34. Juvenile forms of invertebrate animals e.g. caterpillars, maggots [6]

36. Unable to hear [4]

37. A virus that infects bacteria (and may produce genetic modification in the bacteria) [5]

39. Prefix meaning "In favour of" [3]

40. A \_ \_ \_ \_ \_ gene is one that is not expressed unless there are two of them (one from each parent) present. E.g. the gene for colour blindness [9]

42. A natural force or object producing specific results: e.g a bee is an

\_\_\_\_ of fertilization between flowering plants of the same species.

46. Dentine as it occurs in elephant tusks [5]

47. A group of genetically identical individuals, the result of asexual reproduction [5]

48. A tube or channel leading from a gland or organ [4]

49. A branch of the evolutionary tree containing all the species descended from a single common ancestor [5]

51. The cell division process which produces gametes (sex cells) [7]

52. Memo, memory aid or brief letter [4]

55. Domesticated [4]

57. Transport heavy load(s) [4]

58. Of the light-sensitive inner lining at the back of the eye [7]

59. Behaviour that benefits others at a cost to oneself; e.g. predators

bringing food back to members of the pack not present at the kill [8]

61. Eras [4]

63. A form of asexual reproduction in which unfertilised embryos develop into offspring; typically daughters, genetically identical to their mother [15]

67. Fluid-filled, spiral-shaped part of the inner ear [7]

68. Deciduous tree [3]

69. The lowest cardinal number [3]

70. Symbol of the chemical element with atomic number 34 [2]

71. Organisms whose cells have a cell nucleus surrounded by a nuclear membrane [10]

72. To deliberately interbreed male and female with different genotypes in order to produce hybrid offspring [5]

## DOWN

1. A mollusc with a hinged double shell; e.g. oyster, mussel, scallop [7]

2. & 30 Down: A process resulting in the evolution of organisms best adapted to their environment (Two words, [7], [9])

3. Consumed [3]

5. The kind of cell division used for growth, repair or asexual reproduction in which each cell splits into two new cells, genetically identical to each other and the original cell.

6. Tool for propulsion in water [3]

8. Dealt with successfully; managed [5]

9. The science of heredity [8]

11. A term describing the case of a particular allele being expressed in hybrid offspring over the other (recessive) allele that is present; e.g. the allele for dark hair shows \_ \_ \_ \_ \_ \_ over the allele for blonde hair in humans [9]

12. The commonest protein in muscle cells, responsible for the elastic and contractile properties of muscle [6]

14. Organ for hearing [3]

15. The 23rd letter of the Greek alphabet [3]

16. A block of little or no evolutionary change in a species; the word also means "state of equilibrium or inactivity" [6]

21. An island neighbour of Australia North-West of Darwin [5]

22. Related species no longer resemble each other because evolution has adapted them to different ecological conditions; e.g. Darwin's finches [10]

23. Employing [5]

25. The kind of behaviour displayed (for example) by ants, termites, bees, and wasps, where many individuals of the same species interact cooperatively [6]

28. Modification of an organism or its parts that makes it more fit for existence under the conditions of its environment [10]

29. Fast-swimming predatory saltwater fish [4]

30. See 2 Down

31. What a cell produced from a first meiotic division does [9]

33. The basic unit of heredity in a living organism; a piece of DNA that codes for a specific protein or trait [4]

35. Adenosine triphosphate; the molecule that contains the energy the cell needs to carry out almost all of its functions [3]

38. All the individuals of one species in a specified environment [10]

41. Divergence between different populations of the same species to the extent that they split into different species [10]

43. Organisms which are not capable of regulating their internal body temperature by producing their own heat; e.g. Cold blooded animals [9]

44. Organisms whose cells lack a membrane-bound nucleus [10]

45. Systems formed by the interaction of a community of organisms with their environment [10]

50. Facts, statistics, or items of information [4]

51. The average of a set of numbers, calculated by dividing the sum of the numbers by the number of the numbers. [4]

- 53. Same direction as 18 Across [4]
- 54. One possible version of a gene [6]
- 56. Any animal lacking the gene for skin, hair or eye pigmentation [6]
- 60. A person who shows people to their seats [5]
- 61. Orangutans, gorillas and chimpanzees for example [4]
- 62. Very strong wind [4]
- 64. Large deer [3]
- 65. Important high protein bean crop [3]
- 66. Put, lay, or stand (something) in a specified place or position [3]

## SOLUTION

	В	Ι	Е	Ν	Ν	I	A	L		A	Μ	Ι	Ν	0		Α	С	Ι	D	S		G
	Ι			Α			Т				Ι			Α			0					Е
	V			Т			E	Ν	D	0	Т	Н	Е	R	Μ		Ρ	Е	Ρ	S	Ι	Ν
	Α	Ν	Ν	U	Α	L			0		0				Y		E	Α	S	Т		Е
	L			R					М	Ι	Т	0	С	Н	0	Ν	D	R	Ι	А		Т
	V			Α					I		Ι				S					S		Ι
	E	V	0	L	U	Т	Ι	0	Ν		С		D		Ι		U		D	Ι	S	С
						Ι			Α			F	Ι	Т	Ν	E	S	S		S	0	S
А	U	Т	0	S	0	М	E		Ν				V				Ι		R		С	
D		U		Е		0			С	0	Ν	V	Е	R	G	E	Ν	С	Е		Ι	
А		Ν		L	А	R	V	А	E				R		E		G		D	E	А	F
Ρ	Н	А	G	Е				Т		Ρ			G		Ν				Ι		L	
Т				С				Ρ	R	0		R	E	С	E	S	S	Ι	V	E		
А	G	Е	Ν	Т			Ρ			Ρ			Ν				Ρ		Ι		E	
Т		С		Ι	V	0	R	Y		U			С	L	0	Ν	Е		D	U	С	Т
Ι		Т		0			0		С	L	А	D	E				С		E		0	
0		0		Ν			Κ			Α		Α			Μ	E	Ι	0	S	Ι	S	
Ν	0	Т	E		Α		Α			Т		Т	А	Μ	Е		Α				Y	
		Η	Α	U	L		R	E	Т	Ι	Ν	Α	L		Α	L	Т	R	U	Ι	S	Μ
А	G	Е	S		L		Y			0			В		Ν		Ι		S		Т	
Ρ	Α	R	Т	Η	E	Ν	0	G	E	Ν	Е	S	Ι	S		С	0	С	Н	L	E	А
Е	L	Μ			L		Т		L			0	Ν	E			Ν		E		Μ	
S	Е				E		E	U	Κ	А	R	Y	0	Т	Е	S		С	R	0	S	S