GCSE

COMBINED SCIENCE: TRILOGY
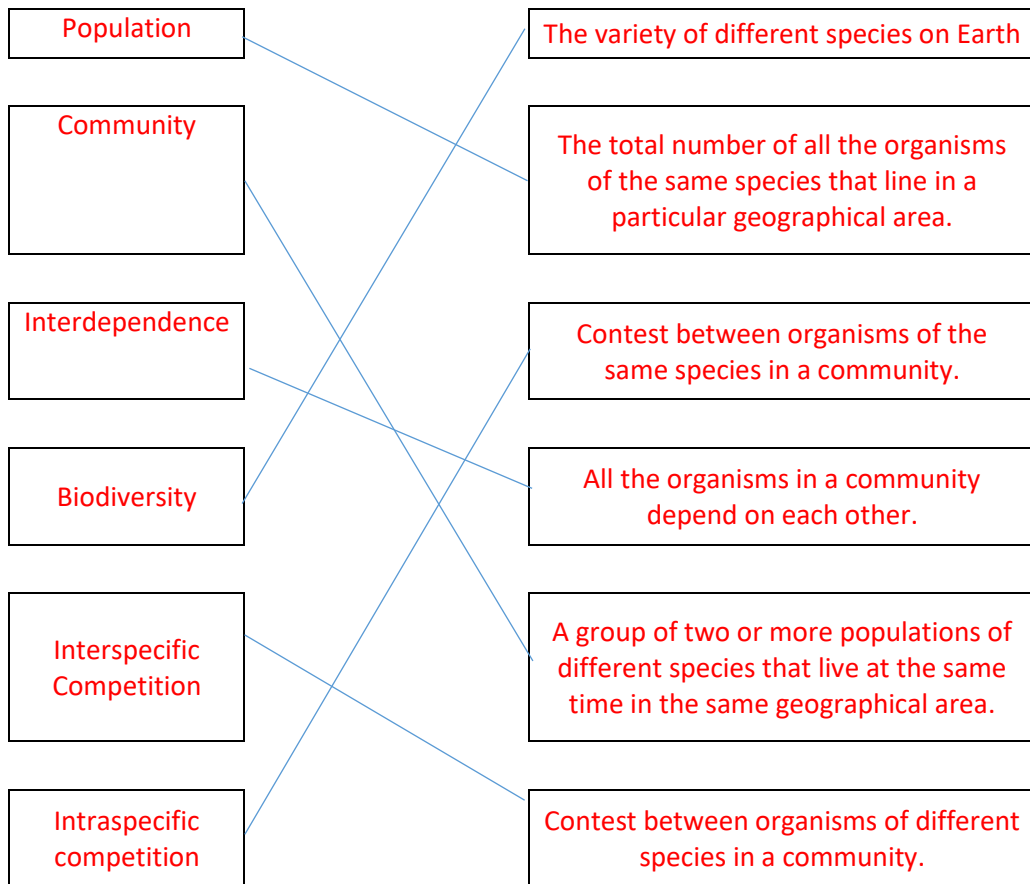
END OF TOPIC TEST

AQA Biology

Q1a	A Protists	1
	B Animals	1
	C Plants	1
	D Fungi	1
	E Bacteria	1
Q1b	A group of organisms that can interbreed to produce fertile offspring.	1
Q1c	As they are non-living	1
	Lack of cellular organisation	1

Q2a   One mark for each correctly drawn line.
       Only one line from each term.

Population		The variety of different species on Earth
Community		The total number of all the organisms of the same species that line in a particular geographical area.
Interdependence		Contest between organisms of the same species in a community.
Biodiversity		All the organisms in a community depend on each other.
Interspecific Competition		A group of two or more populations of different species that live at the same time in the same geographical area.
Intraspecific competition		Contest between organisms of different species in a community.

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Q2b   Any suitable answer for one mark each, maximum of two marks:

    -    Food   1
    -    Mates   1
    -    Territory   1

Q2c   Any suitable answer for one mark each, maximum of two marks:

    -    Light   1
    -    Water   1
    -    Space   1
    -    Nutrients   1

Q2d One mark for each correctly placed factor.

Abiotic Factors	Biotic Factors	
Light intensity	Food availability	
pH of soil	Introduction of a new predator	
Water availability		
		5

Q3a Behavioural adapation 1
Example given, e.g. hedgehog rolls up into ball. 1

Function adaptation 1
Example given, e.g. Snakes produce venom. 1

Q4 Any valid point for one mark each – examples below.
Maximum of six marks.
For full marks the method must be valid and the student must show a clear understanding of the process.

- Relevant equipment, e.g. tape measure, light meter 1
- Name quadrat 1
- Valid method – clear step by step guide to procedure, e.g. mark out transect, place quadrat at specified points along transect, 2
- Clear measurements – % abundance of grass recorded, 1
- Clear measurements – light meter reading at each position 1
- Record results in a table and look for how the abundance of plants were affected by the light. 1

Q5a i. Producer 1
ii. (Primary) consumer 1
iii. Tertiary consumer 1

Q5b A – Photosynthesis 1
B - Respiration 1

Q5c Process A

Carbon dioxide + water ➔ glucose + oxygen 1

Process B

1

Glucose + oxygen ➔ Carbon dioxide + water

Q5d Combustion (burning of fossil fuels). 1

Q5e Any of the following for one mark.