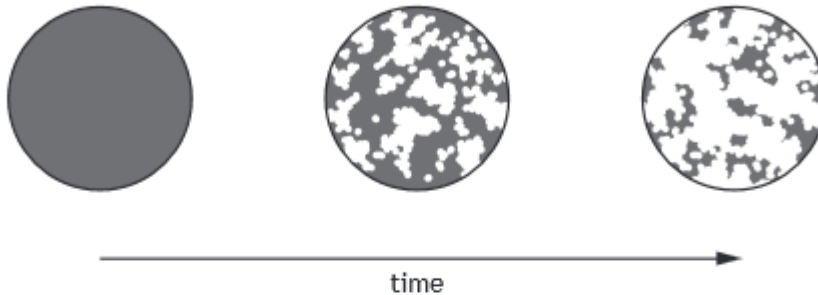


Components of Biodiversity

15. The genetic diversity of individual species is affected when fragments of woodland become isolated.

The diagram illustrates habitat fragmentation of an area of woodland over time.

The shaded areas represent woodland.



- (a) (i) State what is meant by genetic diversity. 1

- (ii) Suggest a reason why a decrease in genetic diversity of an individual species can lead to local extinctions within habitat fragments. 1

- (b) Explain how degradation at the edges of woodland habitat fragments affects biodiversity. 2

- (c) Habitat corridors can be created to remedy habitat fragmentation.
(i) State what is meant by the term 'habitat corridor'. 1

- (ii) Explain how a habitat corridor can increase biodiversity after local extinction. 1

A Write notes on components of biodiversity and how these are measured. 4

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(e) Invasive species have a negative impact on genetic diversity of an ecosystem.

State what is meant by genetic diversity. 1
