

SECTION 21-2 REVIEW

PROPERTIES OF COMMUNITIES

VOCABULARY REVIEW Define the following terms.

1. species richness _____

2. species diversity _____

3. species-area effect _____

MULTIPLE CHOICE Write the correct letter in the blank.

- _____ 1. A community that has great species richness contains
 - a. many different species.
 - b. many individuals in each species.
 - c. a few species whose members control most of the community's resources.
 - d. species that are of great economic value.
- _____ 2. The measure that relates the number of species in a community to the relative abundance of each species is called
 - a. species richness.
 - b. species diversity.
 - c. community stability.
 - d. community interaction.
- _____ 3. The species-area effect is most often applied to
 - a. deserts.
 - b. forests.
 - c. islands.
 - d. grasslands.
- _____ 4. One explanation for the greater number of species in the tropics than in temperate zones is that
 - a. tropical habitats are younger than temperate habitats.
 - b. there is more energy available to support more organisms in the tropics.
 - c. people have been cultivating species for much longer periods in the tropics.
 - d. the climate is more stable in temperate habitats.
- _____ 5. Communities with greater species richness are thought to be more stable because
 - a. the effects of disturbances are not dispersed.
 - b. there are no predators to disrupt the community.
 - c. there are fewer interactions between species.
 - d. there are more links between species.

SHORT ANSWER Answer the questions in the space provided.

1. The table below shows the number of individuals of all of the species found in two communities.

Number of Individuals				
	Species W	Species X	Species Y	Species Z
Community A	0	25	10	15
Community B	100	0	175	300

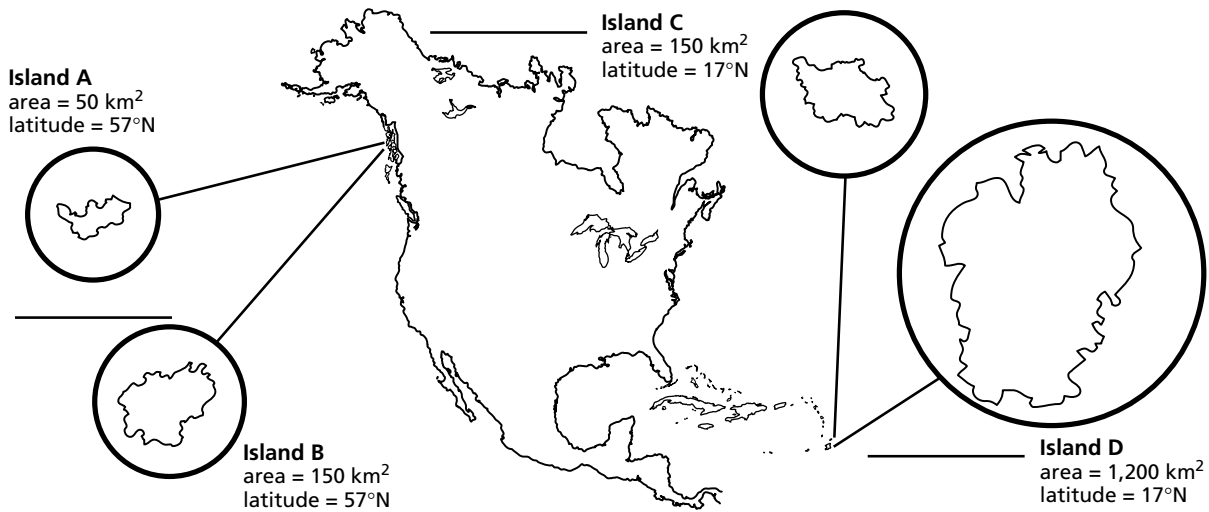
Which community has the greater species richness? Explain your answer. _____

2. How does species richness vary with latitude? _____

3. Why are agricultural fields often less stable than natural communities in the same area? _____

4. **Critical Thinking** Efforts are being made to reintroduce wolves to certain areas from which they had been eliminated by humans. Explain how such reintroductions might affect species richness in those areas. _____

STRUCTURES AND FUNCTIONS The map below shows four hypothetical islands: A, B, C, and D. Rank the islands from 1 to 4 in terms of the species richness you would expect them to have, with the island that has the greatest richness as 1 and the island with the least richness as 4.



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