

問題番号 [1 5] <海洋生物学>

(解答は英語・日本語のどちらでもよい [英語/ラテン語と指示してある場合以外]。文法などの間違いは採点に影響しない。)

Choose TWO topics from the following five and discuss. Within each chosen topic, mention at least one organism (or group of organisms) and indicate its phylum or class in Latin/English. (25 points each, total 50 points)

- (1) Reasons why sessile animals dominate in the sea
- (2) Morphological and ecological characteristics of hard corals
- (3) Ecological roles of large marine predators
- (4) Interspecific interactions in intertidal systems
- (5) Various feeding modes in marine organisms

問題番号 [1 6] <海洋生物学>

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Answer the following two questions. (25 points each, total 50 points)

- (1) Some marine organisms release gametes into the water column. Give an example and consider what mechanisms increase fertilization success.
- (2) Discuss how the species diversity of marine organisms (selected groups of your choice) varies at large spatial scales.