

Topic/Objectives: 7-3 Relationships in the Ocean; (1) Describe examples of mutualism, parasitism and commensalism in the ocean; (2) Consider the costs and benefits of diverse reproductive strategies used by species.	Name:
	Date:
	Period:

Essential Question: What type of relationships do organisms in the ocean have with each other?

Questions:	Notes:
	<p>When different species live in close proximity, relationships that aid in the survival of a species can evolve.</p> <ul style="list-style-type: none"> ◦ _____ is when one or both species benefits from the close relationship between species. ◦ Symbiotic relationships between different species is called an _____ relationship. ◦ Symbiotic relationships between two organisms of the same species is called an _____ relationship.
	<p>Types of interspecific relationships include:</p> <ul style="list-style-type: none"> ◦ _____ – where both species benefit from the relationship. ◦ _____ – where one species benefits while the other is not affected. ◦ _____ – One organism benefits by feeding off the host, harming the host. ◦ _____ – One organism hunts, kills and consumes the other organism.
	<p>Relationships between organisms generally begin with _____ or _____.</p> <ul style="list-style-type: none"> ◦ _____ results due to the continual response and shift in the populations over time. ◦ Species A evolves in response to Species B, while _____ will then drive Species B to evolve in response to Species A.
<p>Intraspecific relationships may be necessary for organisms to avoid _____, including the need to _____.</p> <ul style="list-style-type: none"> ◦ _____ reproduction is when an organism can reproduce without a partner, producing offspring genetically identical to the parent. <ul style="list-style-type: none"> ◦ Little risk is taken by the organism to find a mate. ◦ No genetic _____ leaving the offspring vulnerable to change, natural or human-induced. ◦ _____ reproduction occurs by the union of gametes (sperm and egg) usually requiring two parents. <ul style="list-style-type: none"> ◦ Offspring are genetically _____, allowing for quick evolutionary change in response to environmental changes. 	

	<p>Some organisms reproduce both sexually and asexually.</p> <ul style="list-style-type: none"> ◦ One method of asexual reproduction, called _____, the parent divides itself in unequal parts. ◦ _____ organisms – that are unable to move – use specialized methods to acquire or release their gametes into the water. ◦ Corals and sponges utilize _____ to release large amounts of gametes into the water to ensure a high rate of fertilization. ◦ The high fertilization rate ensures _____ for the organism in spite of predation and environmental obstacles. <p>Parental care of offspring:</p> <ul style="list-style-type: none"> ◦ Parental care takes time and energy on the part of the parent _____ the number of offspring a species can produce. ◦ The investment of energy during the development of an offspring greatly _____ the individual offspring’s chance of survival and reproduction. <p>Internal versus external development:</p> <ul style="list-style-type: none"> ◦ Laying multiple eggs (_____ development) increases chances of survival for an organism. ◦ _____ development provides protection for a developing offspring increasing survivability.
Summary:	