Quiz 1 –Marine Ecosystems - Review

SF Bay Estuary

1. What is an estuary and how is it characterized as?

2. Explain what a salinity gradient is:

3. What environmental factors affect salinity and in which direction?

⇑ Salinity	⇓ Salinity
1)	1)

4. Why do Estuaries require species that show flexibility?

5. Explain how tectonic plate movement affects the San Francisco Bay estuary?

   Bonus: which type of tectonic movement is it classified as?

6. Explain the estuary functions:

Chemical Functions	Physical Functions
1) •**PRO**: • **CON**:	1) 2)

7. Why are surface waters more productive in an estuary?

8. Explain 2 adaptations that **Plants** and 2 adaptations **animals** have to an estuarine environment and why they are needed:

	Adaptation	Why it is needed
Plant	1)	
	2)	
Animal	1)	
	2)	

Open Ocean Ecosystem

1. Explain and draw a pycocline:

2. How is a pycocline maintained? *(Why doesn't it all just mix?)*

3. What are 2 characteristics of the surface of the ocean? *(Consider the 2 factors that characterize this environment)*

4. Why does it look blue under water?

5. Explain the functions of open ocean:

Chemical Functions	Physical Functions
1)	1) 2)

6. Explain upwelling and what causes it to occur?

7. Why do we have so many migratory species visiting the coast of California, explain?