Aquarium of the Pacific Field Trip

Name_

Answer the following questions. The headings correspond with the displays in the museum. You should have received a map when you entered, which will help you find each display.

GREAT HALL-BLUE CAVERN (Main Lobby Area)

- 1. How big is the blue whale? How much do they eat per day?
- 2. Which fish is on the endangered list?
- 3. Which fish is commonly mistaken for a tuna?
- 4. What kind of shark is found here? Why are they prone to "aggressive fishing"?
- 5. Which type of fish can change its gender?

TROPICAL PACIFIC PREVIEW and NORTHERN PACIFIC PREVIEW (Main Lobby Area)

1. What are the differences in temperature between the Tropical Pacific, Southern California and North Pacific environments?

- 2. What of the eight Tropical Pacific residents gets the largest, and what are its dimensions?
- 3. How big do Wolf Eels get?
- 4. How many arms can a Sunflower Star have?

SEA OF CORTEZ/GULF OF CALIFORNIA

- 1. What are Totoaba? Is it endangered? How are they managing the population?
- 2. How big are garden eels? How do they keep from being eaten?
- 3. Where is the Sea of Cortez? What surrounds it on all sides?

OUTSIDE DISPLAY/PETTING ZOO

- 1. What are Elasmobranchs? What is the composition of their skeleton?
- 2. What kinds of critters do they have for you to pet?
- 3. What kind of critters are in the tide pools?
- 4. Describe the six super senses of sharks. Name them and their dimensions.
- 5. Who is Rhizopora manglei? How do they help sharks and the general welfare of the tank?
- 6. What are chromatophores?
- 7. What are moai? Where were they originally found?
- 8. How do you tell the difference between a male and female shark?
- 9. What is intrauterine cannibalism? Who does it?
- 10. Is the Lorikeet exhibit open? If so, what types of Lorikeets are on exhibit?
- 11. Which sharks are in the shark lagoon?
- 12. What does each of these critters eat?

<u>Critter</u> <u>Lunch</u> Zebra Shark White Spotted Guitarfish Sand Tiger Tiger

Great White

NORTHERN PACIFIC

- 1. What colors are the sea anemones?
- 2. When and how were the northern Pacific headlands created?
- 3. How can you tell a male Puffin from a female?
- 4. Which egg is the roller, the Puffin or the Murre? Why?
- 5. When does an Octopus look for food?
- 6. How big can the Giant Octopus get?
- 7. The crested auklet secretes something that smells like tangerines. What is the purpose?
- 8. Why were sea otters hunted to near extinction?
- 9. What is the recovery rate of the sea otter population of the Pacific northwest?
- 10. What kinds of crabs eat their own kids?
- 11. How are cliff dwelling bird's eggs specialized?
- 12. How long have Sea Jellies been around? What do they lack?
- 13. Describe the life cycle of a jelly? Describe each stage.
- 14. Which egg is the "roller" in the egg roller exhibit?
- 15. Watch the little movie about the Lionfish. Where are they from, and how did they get into the Atlantic?
- 16. Who is in the touch tank this week?

SOUTHERN CA/BAJA

- 1. Which fish is a stay-at-home guy, where the males build the nest and protect the eggs?
- 2. Describe how Swell and Horn Sharks lay their eggs.
- 3. What is a Pinnacle? Who lives there?
- 4. Identify 2 different colors of sea urchins below by name.
- 5. Why is abalone disappearing?
- 6. Where does the aquarium find its seals and sea lions?
- 7. Why do anemones, jellies and corals have in common?
- 8. Describe the process that allows us to examine shark babies.
- 9. What's the difference between a sea lion and a seal?
 - a) Which sea lion is the oldest one? (What is its name?)
 - b) Which one is the biggest show-off?
 - c) Who arrived most recently at the park?

Seal and Sea Lion Care

- 1. What do they eat?
- 2. How much do they weigh?
- 3. How does a sea lion become a resident of the aquarium?
- 4. Why do we train them?

TROPICAL PACIFIC

- 1. Find a Palette Tang. What color is their body? How about their tail?
- 2. Describe the relationship between the anemone and an anemone fish.
- 3. What happens if you step on a Stonefish? How many are in the tank? Could you find them all?
- 4. Which sea urchin could harm you?
- 5. What is the world's most venomous fish?
- 6. How big is the Leather Coral? What does it look like? Compared to other corals, what is special about it?
- 7. Which animals have toxins that have been synthesized for use in human diseases?
- 8. The main critter of the tropical environment is the______. Clue: they are the critter that the reefs are typically centered upon...
- 9. What is the difference between hard and soft coral?
- 10. What do sunlet wrasses and fairy basslets do that is unusual?
- 11. Does a sea snake use its' venom to kill its' prey? How long can they stay submerged?
- 12. Are Clownfish (like Nemo) really exhibiting clownlike behavior? How do they act around other Clownfish?
- 13. How does water normally move in the Tropical Pacific? During El Nino, what changes?
- 14. How do sea dragons care for their young? Who incubates sea dragons eggs?
- 15. What type of colorful froggies do they have in the small tanks?

CALIFORNIA'S CHANGING WATER (Main Lobby Area)

1. Describe the adaptations of waxy vs. fuzzy vs. succulent critters.

2. When was the last big drought in this area? What were the results of it?

3. What is the state record for precipitation in 24 hours?

4. Which observatory is responsible for taking the data for the Keeling Curve (of CO₂)?

CALIFORNIA'S CHANGING WATER (Main Lobby Area)-continued

What are the main events that occurred geologically in southern California with respect to the geologic time scale? I did the first one for you to show you how it is done...

Geotime Period	How Long Ago?	Events
Anthropocene	Present	Humans arrived and messed up everything
Holocene		
Pleistocene		
Mid-Pliocene		
Mid-Miocene		
Eocene Epoch		

OCEAN SCIENCE CENTER-There are two short movies being shown here. Write their title, and describe the content of each, giving me at least five facts from Each.

Movie 1	Movie 2
Facts	
1	1
2	2
3	3
4	4
5	5

Our Watersheds: Pathways to the Pacific (This exhibit is outside.)

Describe five important facts from this exhibit.

1:			
2:			
3:			
4:			
5:			

Molina Animal Care Center

1. What type of work and/or research do they do at this facility?

2. Are there any specific critters that are in rehab?

June Keyes Penguin Habitat

- 1. What kinds of penguins do they have on exhibit?
- 2. What type of climate do these critters live?

Wonders of the Deep Exhibit

1. Name the five zones of the ocean and give their approximate depths and characteristics: <u>Characteristics</u>

Top Zo	one:			
Bottom	Zone:			
	Below a depth offeet (orm), there is not enough light for plants to produce energy.			
3.	What percentage of the ocean is dark ALL OF THE TIME?			
	4. Watch the little flick about critters of the deep near the zone chart. According to the movie, since the deep waters are so cold, the metabolic rate for the critters that live there is much longer.			
	a. Corals can live how long?			
	b. Fish can live how long?			
5.	Many critters are bioluminescent in the deep ocean. What is meant by that?			
6.	What is "marine snow"?			
7.	What is chemosynthesis? Why do they do this?			
8.	Describe how the bizarre Anglerfish mates.			
9.	What is the Abyssus Theory? Is it a good theory? Why or why not?			
10.	What is a Giant Siphonophore? How big is it? How deep do they live?			
	Describe the basic characteristics of the hydrothermal vent community. Name at least four critters that live there.			