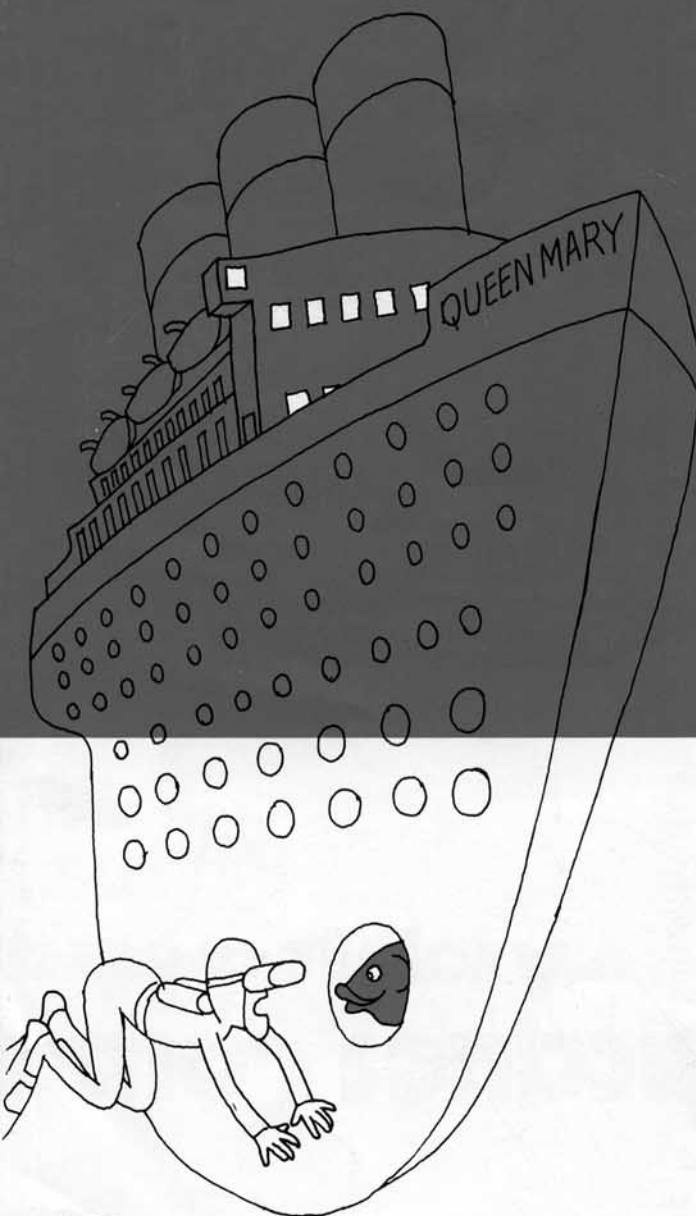


Queen Mary ^{VF}

Queen Mary Museum
Jacques Cousteau's Living Sea
Upper Decks

LONG BEACH, CALIFORNIA



California VF.

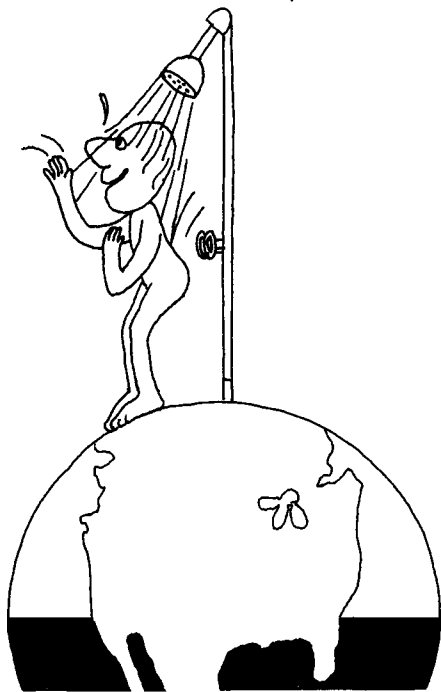
Jacques Cousteau's Living Sea

A voyage of adventure and discovery

The Living Sea is the inspiration of Jacques Cousteau, oceanographer, explorer and scientist. The sea is his life; the sea is the unique element that makes our planet the sole hospitable environment in the solar system. "The sea is the crucible of all life on our planet... Clearly, our future, even our survival, depends directly on its preservation. The sea is our life's blood, that is the underlying message of The Living Sea."

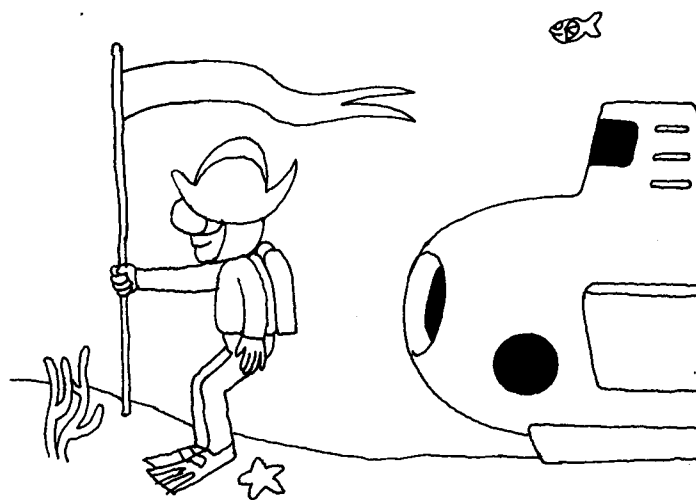
The Water Planet ①

Your introduction to the Living Sea is a long tunneled ramp. Murals and mirrored walls depict Mercury, Mars and Venus and their inhospitable environments.



Man in the Sea ③

Here is the theme structure for the Living Sea. The tall rotating tower represents a cross section of the ocean, the different levels of life and man's deep sea explorations. The DENISE, DEEPSTAR 4000, ALVIN and TRIESTE I are truly exploratory space ships equivalent to our Apollo vehicles; their medium is the sea rather than outer space. Here you will see that



man is upon the very threshold of a new and difficult exploration: unlocking the secrets of the sea.

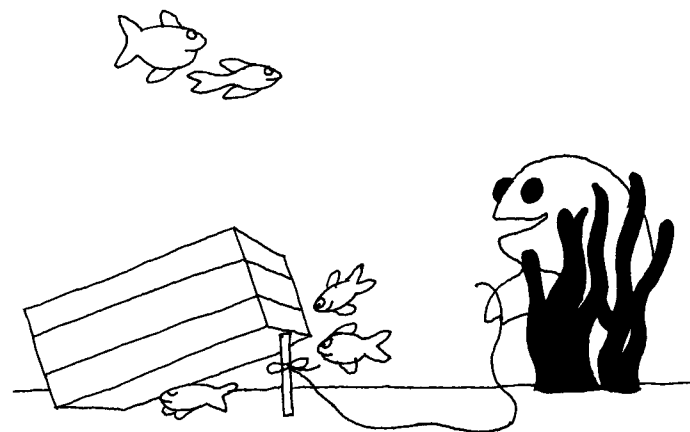
Window in the Sea ④

Even though a glass of water seems "crystal clear," the ocean is the most visually restrictive medium known to man. Depth, density and lack of natural light all contribute to poor visibility. Here you will see how nature has equipped creatures of the sea with an

Some species of cod produce as many as 9,000,000 eggs to produce one fish. Grey whales travel 7,000 miles to bear their young. For some, mating is the supreme act of life, ending in death for the adult. "Procreation" portrays the many forms of new life, the varied means of protecting the young and behavior during mating and birth.

Quest for Food ⑦

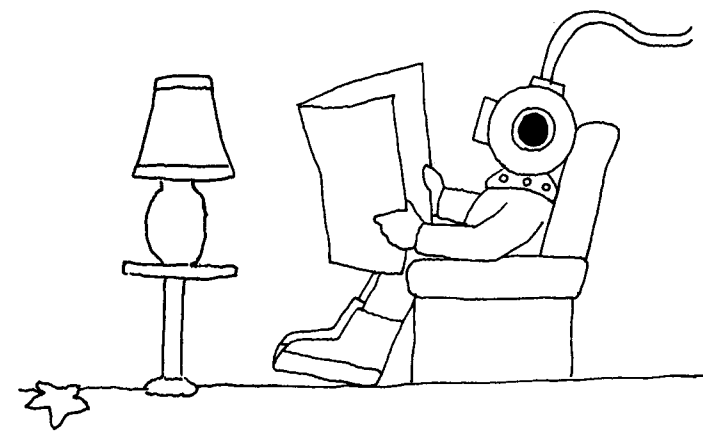
Every living thing in the sea is potential food for another living thing. This is the law of the sea. Here you will learn that size alone does not dictate diet;



some of the ocean's largest creatures are vegetarians or "passive feeders." See the wide variety of methods of locating and catching a meal. Speed, smell and vision are primary talents used to find food.

Propulsion ⑧

Nature has devised a fantastic array of different



Homo aquaticus in his watery environment, how a new concept in breathing may be possible, how speech, movement and social interactions may be changed.

Oceanography Today ⑩

Oceanography is the application of all sciences to the unique environment of the sea. Its disciplines cover everything from geology to psychology and the traditional arts of seamanship and navigation. There are many oceanographic vessels plying the world's oceans today; see where they are currently located and learn what they are studying and exploring.

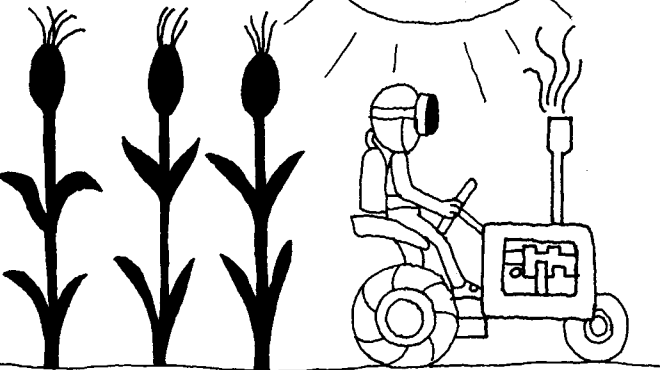
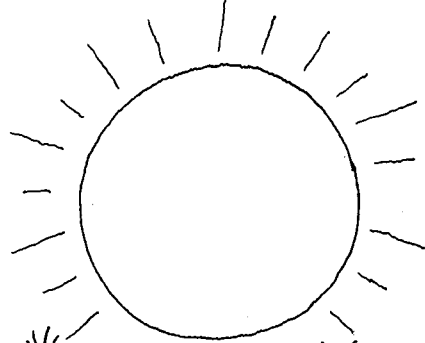




The stage is set for our own unique planet, Earth, formed approximately 4½ billion years ago. All water present during Earth's formation is still present: 1,322 million cubic kilometers of water. Water changes its state constantly, through liquid, solid and vapor states. Though water covers 70% of the Earth's surface, it comprises but a tiny fraction of Earth's volume. "The Water Planet" shows how man uses water and water power, how we use the ocean currents, and how water is recycled through the environmental system.

Crops from the Sea ②

Just as there is a natural food chain on land, so is there in the ocean. The basic food and source of life in the sea is phytoplankton, which provides both oxygen and nourishment. Phytoplankton is the basis of the pyramid of life; "Crops from the Sea"



demonstrates the effects of sunlight and ocean depth upon the food cycle of the sea. You will learn how man affects the food chain, how the cycle may be interrupted by pollution, how we may effectively "farm" the oceans for future generations.

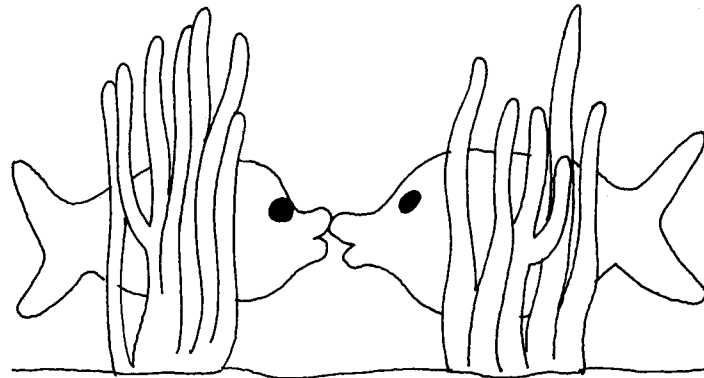
endless array of sensory capabilities. See the various forms that eyes take and how some creatures can provide a light source from their own bodies.

Invisible Messages ⑤

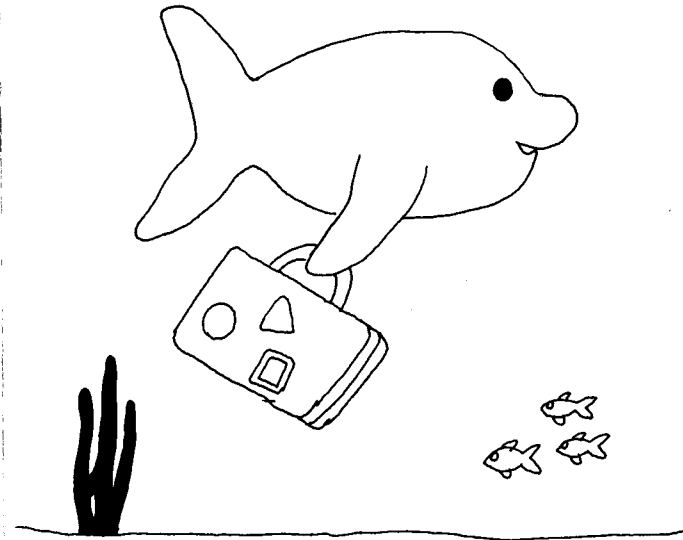
(Sponsored by General Telephone and Electronics Corp.) Because of the limited field of vision in the sea, nature has provided and expanded other sensory forms for various ocean creatures. For example, the Lateral Line is truly a sixth sense that allows certain fish to detect pressure. Sound is another important source of perception in the sea. Orchestrated exhibits demonstrate such varied sounds as love calls, distress signals and language among porpoises.

Procreation ⑥

The miracle of procreation in the sea is a story of incredible beauty and variety. Continuation of the species is often accomplished against fantastic odds.



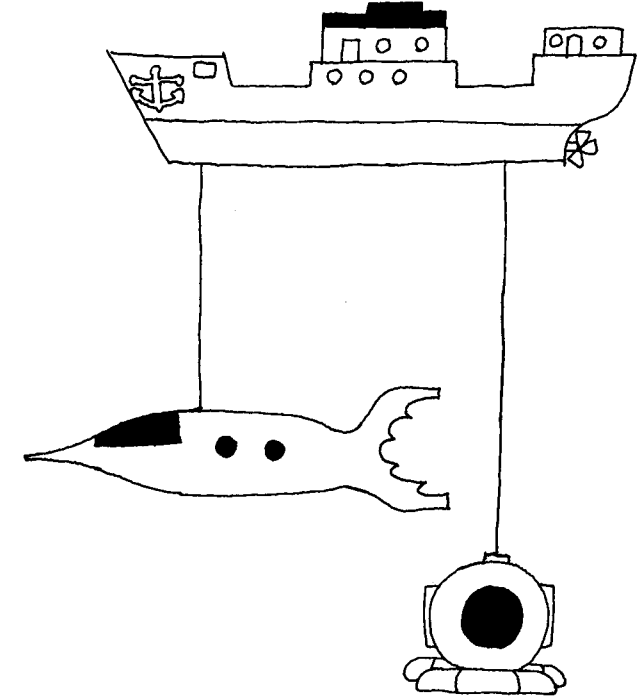
modes of propulsion. Here you will see how propulsion dictates the life style of ocean creatures.



Some spend their entire lives on the same rock. Others, like the tuna, are truly world travelers. Learn here that jet propulsion is really millions of years old. It is one of the basic modes of propulsion in the sea.

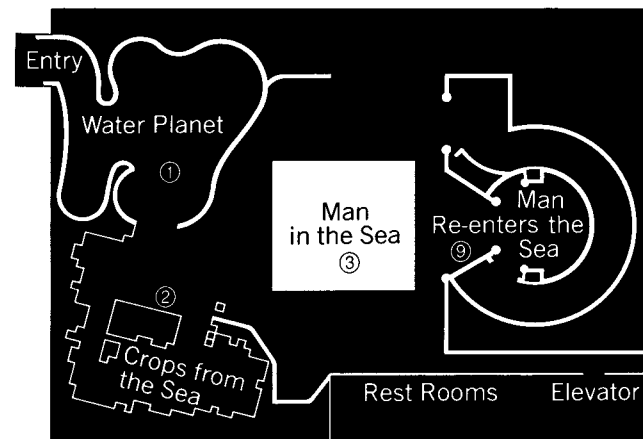
Man Re-enters the Sea ⑨

This is our window to the future. As man learns to overcome the hazards and difficulties of undersea life, will he take up residence beneath the sea? Learn how science is beginning to solve the problems of air pressure, oxygen supply, light and movement. See

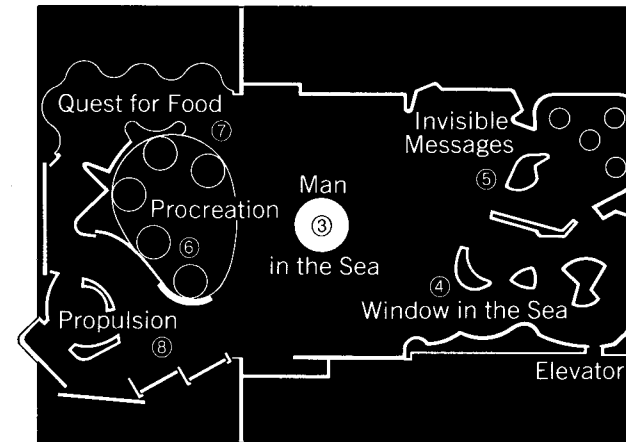


Sandwich Island. Located in the lobby of Jacques Cousteau's Living Sea, offers a selection of hot and cold sandwiches. Beverages, pastries and soups are also available.

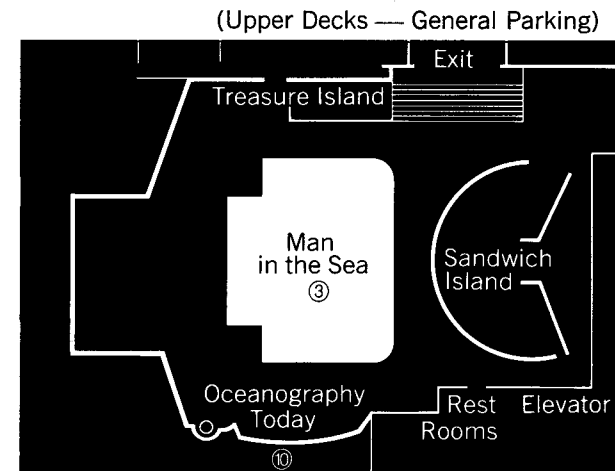
Treasure Island. Adjacent to the Sandwich Island, displays a variety of quality educational items including books, models, fossils, ice blocks, shells, etc.



Middle level



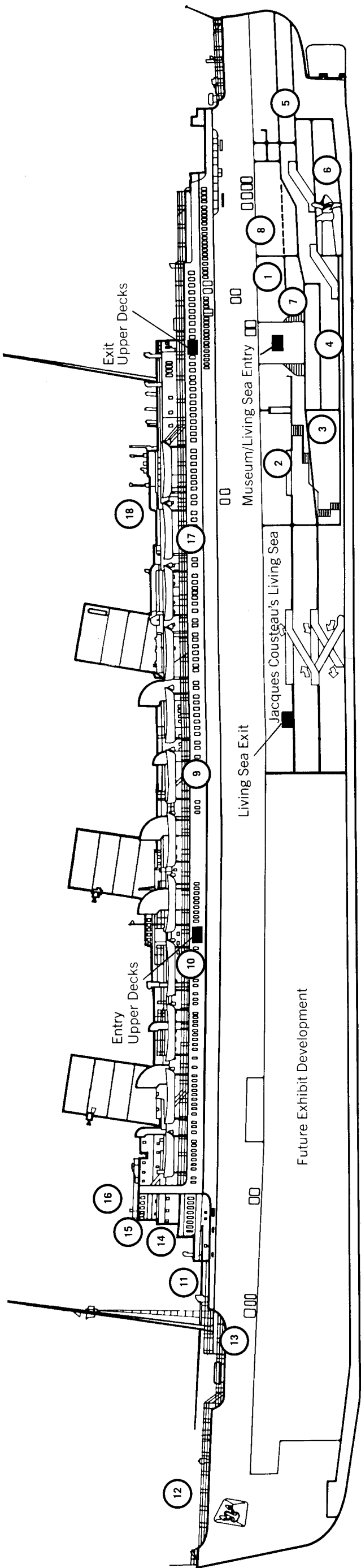
Lower level



Upper level

The Queen Mary

Welcome to the Queen Mary, a complete family entertainment and educational complex featuring the Queen Mary Museum, Jacques Cousteau's Living Sea, and the Upper Decks, as well as restaurants, shops and other attractions for your enjoyment.



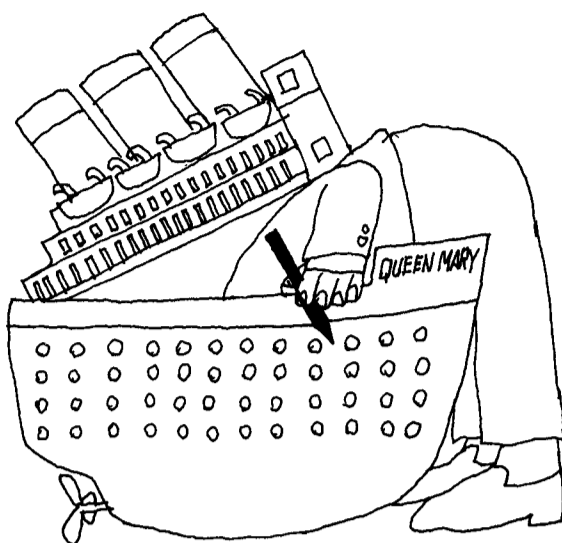
Queen Mary Museum

- 1. Aft Lobby, Museum Entry, Information Booth, Model of Mauretania** (in operation before the Queen Mary, this famous Cunard Liner reigned from 1907 to 1935). "C" Deck was removed to create present space.
- 2. Queen Mary Story.** (Sponsored by California Federal Savings and Loan.) Exhibits explain the history of the Queen Mary. Included is "Cunard — the Pioneer of Atlantic Express Service" (from Cunard's Britannia in 1840 to the luxurious Queen Mary), "Queen of the Atlantic", "Gray Ghost", "Challenge of job 534", and "Awards and Recognition". Special exhibit features include an 18-foot, 16-ton ship's anchor, two special historical films, a 21-foot model of the Queen Mary built in 1936 and a six-foot model of the Britannia (both done in quarter-inch to a foot scale to show relative size). Viewing areas have been cut through the deck which look down into various parts of the Queen Mary's huge aft engine room.
- 3. Engine Room.** (Engine Room, Shaft Alley, Aft Steering and Propeller exhibits sponsored by Standard Oil Company of California.) If the look doesn't satisfy (and it won't), you may explore the engine room through a maze of piping, valves and instruments as well as pass between two of the ship's 40,000 horsepower engines. And hear authentic engine room sounds.
- 4. Shaft Alley.** Lowest part of the ship. Frames, hull plating and the four 26-inch-diameter propeller shafts. Alleys lead to aft steering station exhibit.
- 5. Aft Steering Station.** Compartment contains massive hydraulic rams which activated ship's 140-ton rudder. The top of the rudder post is visible. Rudder is of hollow construction, making it buoyant and thus eliminating wear caused by weight. Ship could be steered from this station in case of emergency.
- 6. Propeller.** A special "room" has been constructed to enable passage outside the ship's hull to see one of the four, 18-foot-diameter, 35-ton bronze propellers. Propeller is in 40 feet of specially filtered water.
- 7. E Deck Lounge.** Rest area, entrance to theatre, special exhibits.
- 8. Theatre.** A three-deck-high, 180-seat facility, equipped with the latest projection, sound and lighting systems, is used for special showings and lectures.

Upper Decks

- 9. Main Lounge.** First-class "passengers" step aboard ship on Promenade Deck. Members of the ship's company are on hand to familiarize "passengers" with one of the most luxurious rooms afloat — the social center for the voyage. The three-story-high vaulted ceiling is constructed of birch with pillars and walls of maple and makore paneling. The bronze sculptures, three fireplaces and urn-like lights of onyx are typical of the grandeur of the 1930's.
- 10. Piccadilly Circus.** Exclusive shop area and meeting place when the Queen sailed the Atlantic.
- 11. Cargo Hatch.** On the forward weather deck. Typical ship's cargo on display. Special feature is a 1935 12-cylinder Daimler which was the personal limousine of the ship's namesake.
- 12. Bow.** Off-limits territory to all former passengers. Seven stories above water, it's an ideal picture taking spot. Features include the anchor chain with each link weighing over 200 pounds, hawse pipes which allowed chain to flow through deck, huge electrically driven anchor windlasses, docking gear, and six-deck-deep bosun's hatch.
- 13. Where the passengers lived.** Comfortable but limited second-class and third-class accommodations are contrasted with a luxurious first-class suite (maid's room, sitting room and bedroom). In the same area see the troopship quarters, the "home" of World War II G.I.'s. Nearby is the ship's original fire station equipment.
- 14. Officers Quarters.** High in the ship's forward superstructure is the shipboard home of the Queen's top officers. Photos of many of the Queen Mary's captains are displayed. Visible compartments include the steward's cabin and pantry, wardroom, and the captain's suite where the day room was used for the ship's most select social functions.
- 15. Bridge.** Command station of the Queen Mary — 90 feet above the waterline. A display in brass features steering apparatus, engine room telegraphs and speaking tubes, navigational instruments, ship's communication gear and damage-control monitoring system. Bridge was normally manned by a complement of four: watch officer, navigating officer, quartermaster and messenger.
- 16. Top of the House.** Ship's uppermost deck. Used for taking compass bearings. Also the location of the ship's main searchlight platform in case of rescue at sea.

- 17. Sun Deck.** Where passengers strolled in fair weather. Fast-food service and shops may be reached from both port and starboard sides.
- 18. Lifeboat.** A lifeboat drill is conducted on starboard side of Sun Deck. Display cases show lifeboat equipment.



Interesting Queen Mary Facts

Builders: John Brown & Co., Ltd., Clydebank, Scotland.
Keel Laid: December 1, 1930.
Work Suspended: December 10, 1931.
Work Resumed: April 3, 1934.
Launched: September 26, 1934.
Maiden Voyage: May 27, 1936.
War Duty: March 1940 — September 1946.
Reconditioned: July 31, 1947.
Retired: September 19, 1967 (after 1001 crossings of the Atlantic).
Departed On Last Great Cruise: 9:30 A.M., Tuesday, October 31, 1967.
Arrived at Long Beach: 10 A.M., Saturday, December 9, 1967.
Turnover: Removed from British registry, and officially turned over to the ownership of the City of Long Beach, 10 A.M., Monday, December 11, 1967.
War History: 765,429 military personnel — 569,943 miles. 12,886 GI brides and children. Carried wounded returning to U.S., prisoners to camps in U.S. Transported Winston Churchill three times during war for conferences in U.S.
Overall Length: 1,019' 6"
Moulded Breadth: 118'
Keel to Promenade Deck: 92' 6"
Prom Deck Length: 724'
Keel to Masthead Top Height: 237'
Keel to Forward Funnel Height: 181'
Draft: 39' 4-9/16"
Gross Tonnage: 81,237
Number of Decks: 12
Passenger Capacity: 1,957 persons



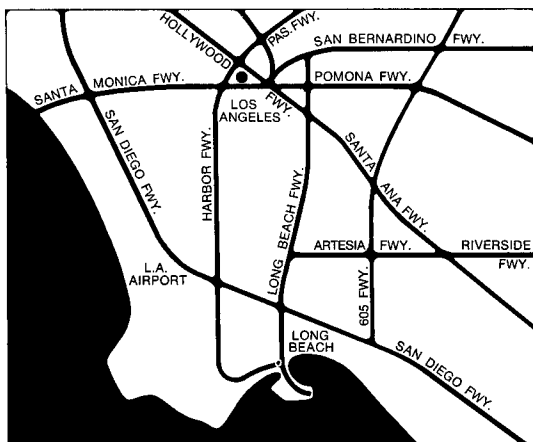
Number of Cabins: (949)
 321 first class; 347 cabin class; 281 tourist class
Officers & Crew: 1,174
Rudder Weight: 140 tons
Anchors & Chains: (3) 16-ton 18' anchors, 990' chains with 2' links. Each chain weighs over 200 tons.
Lifeboats: (24) Powered by diesel engines. 145 persons in each. Could be lowered fully loaded by one man.
50,000 Tons of Metal: Total weight of hull and machinery exceeds 100 million pounds.
Rivets and Plates: Over 10 million rivets. Plates range from 8' to 30' in length and up to 1 1/4" in thickness.
Portholes: Over 2,000.
Funnels: Last of the three-funneled ships. Elliptical. 36' fore and aft. 23' 4' wide. Height: Forward funnel is 70' 6". Middle funnel 67' 6" and the aft 62' 3".
Whistles: (3) Steam-type. Two on forward funnel, one on middle. Over 6' long. Each weighs 2,205 pounds.

Restaurants and Shops

Specialty Queen Mary Corporation, subsidiary of Specialty Restaurants Corporation, master lessee aboard the Queen Mary for food, beverages and merchant-tenants, serves lunches, dinners and banquets in picturesque locations. The fashionable Lord Nelson's and Lady Hamilton's restaurants and Observation Bar are situated along Promenade Deck. The elegant Sir Winston Churchill's is high above Sun Deck in the after part of the ship. Banquets are served in five locations, including the magnificent Queen Salon (the former Main Lounge) and the Grand Salon (the former first-class dining room). Specialty Queen Mary also provides fast-food service in several convenient areas. For banquet information or luncheon or dinner reservations, call (213) 435-5671. An array of exclusive shops, located on Promenade and Sun Decks, offers quality imported and domestic merchandise.



California Museum of the Sea Foundation
P.O. Box 20890, Long Beach, Calif. 90801
(213) 435-4747



The Long Beach Freeway ends at the Queen Mary.
Open daily.

Admission:	Child (5-11);	Junior (12-17);	Adult
Tour	\$.50	\$.75	\$1.00
Museum/Living Sea	\$1.00	\$2.00	\$2.50
Combination	\$1.25	\$2.50	\$3.25

Group Rates (20 or more): Arrangements must be made in advance. Contact Group Services, Museum of the Sea, P.O. Box 20890, Long Beach, Calif. 90801. (213) 435-4747.

Parking: Cars — \$1.00; Buses — \$2.00; Motorcycles — \$.50.