



Courtyard Symbol Key

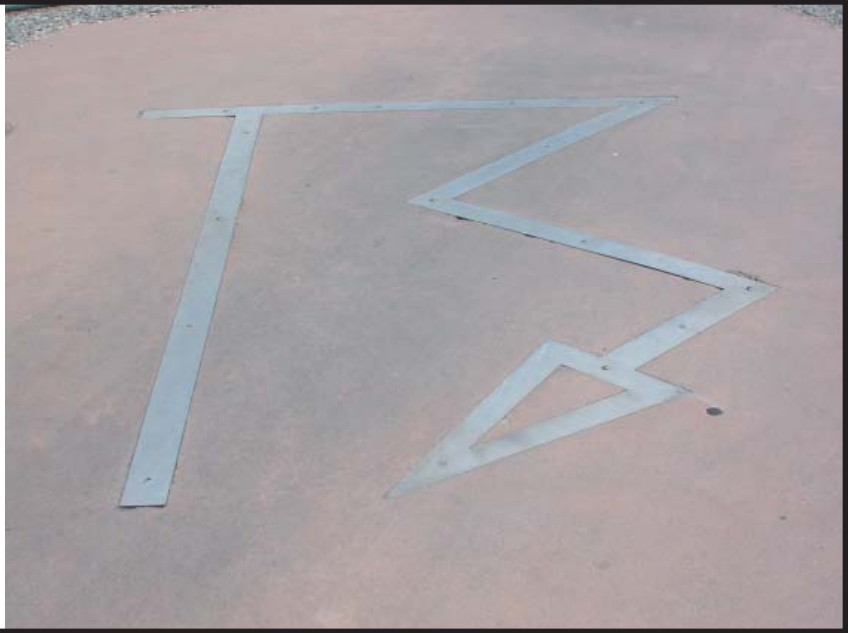
Introduction

The courtyard in front of the Pacific Museum of the Earth (between the Earth and Ocean Sciences - Main and Earth and Ocean Sciences - East buildings) was designed to represent the varied nature of our department. There are three categories of design elements: atmosphere, ocean, and Earth.

There are three main “medallions,” one for each theme. The main medallions are the largest symbols and are a salmon colour. Each medallion indicates the beginning of a theme in the key below.

In addition to the medallions there are six paved insets for each of the three themes. These insets are done in concrete and bear symbols related to their theme.

Heavy thunderstorm.



Light rain. Thunder heard during the past hour, but not heard now.



Heavy and continuous snow.



Moderate or heavy
freezing rain.



Dust devils.



Heavy or continuous,
but not freezing, rain.



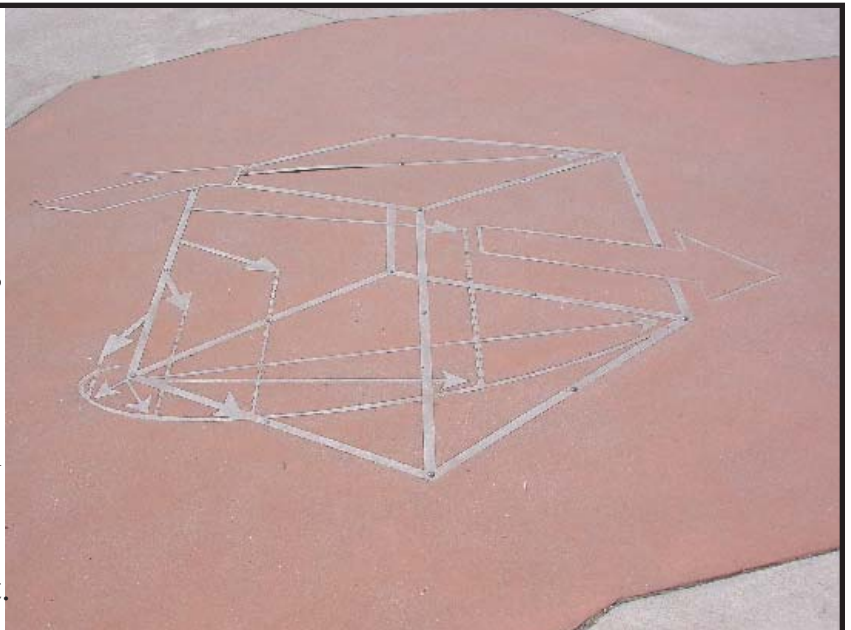
Water vapour.

The clusters are water molecules: one oxygen and two hydrogen atoms each.



Ekman transport.

Wind blowing across the ocean creates a net flow 20-45 degrees to the right of the wind direction. Surface water drags on deeper water, setting a spiral into motion. Internal friction reduces current velocity and the Coriolis effect shifts the water farther to the right with depth. The average flow over the depth of this spiral is 90 degrees to the wind direction and is called Ekman transport.



Dinoflagellate.

A recent species of plankton.



Chitinozoan.

An ancient species of plankton that existed in Earth's oceans between 495 and 355 million years ago.



Shallow wave.

The horizontal line is the sea floor. The wavy line is the wave. The circle is the motion of water particles; particles at the wave crest move forward. In the trough they move backward, giving a circular orbit. This becomes flatter with depth because of the seafloor (the circle overlaps an ellipse, which overlaps a flatter ellipse). At the seafloor, motion is a horizontal oscillation (\longleftrightarrow).



Deep wave.

Again, the horizontal line is the sea floor, the wavy line is the wave, and the circle shows water particle motion. In a deep water wave water particles are not affected by the sea floor and so their orbits do not grow flatter. However, they do grow smaller with depth (represented by the circles with successively smaller diameters) until there is no particle motion at all.



Breaking wave.



Spring tides.

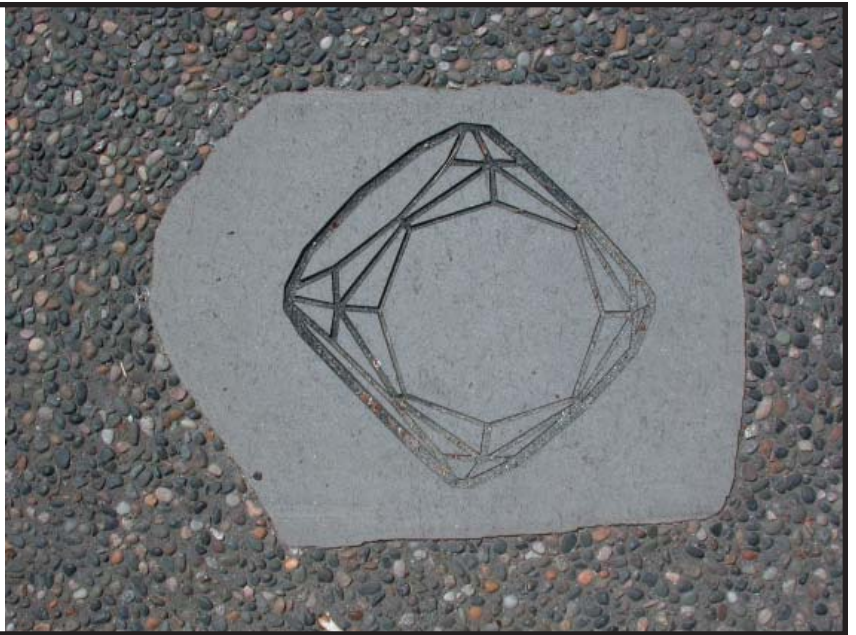


A cut away sculpture of Earth showing the crust, asthenosphere, mantle, outer core, and inner core.



Fluorite.

A mineral. Fluorite was the favorite mineral of one of the most influential curators of the two predecessors to the Pacific Museum of the Earth.



Strombolian eruption.

A type of volcanic eruption characterized by jetting of clots or “fountains” of fluid basaltic lava from a central crater.



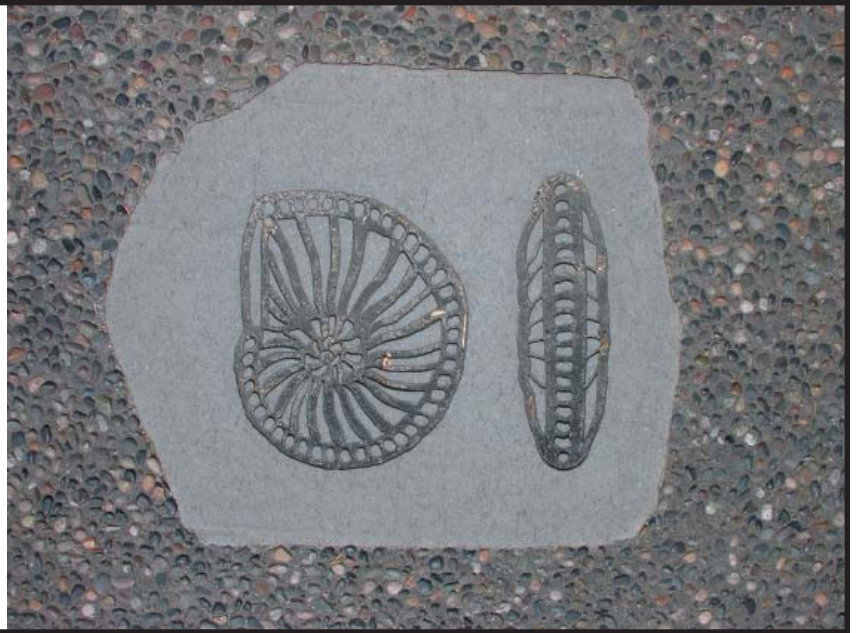
Hydrogeology.

The study of sub-surface waters and related geologic aspects of surface water. This diagram shows rain falling (on the left), the water table (the somewhat V-shaped line), and a spring (the two vertical parallel lines on the right) which is causing the water table to be depressed (this is why the water table is V-shaped instead of being a straight horizontal)



Ammonite.

Ammonites are a variety of mollusc which was very plentiful and widespread in the geologic past, but which has been extinct for millions of years.



Slip surface.

A slip surface is the plane along which a landslide moves.



Geophysical techniques.

The methods by which we study the interior structure of the Earth. The V-shaped lines are waves that have been directed into the Earth. When they encounter a different layer of rock they reflect back. The speed and angle at which they return to receivers on the surface tells us about Earth's structure.

