

## Time Capsule /Chaparral to Ocean Science School Program

### LINKS TO CALIFORNIA HISTORY – SOCIAL SCIENCE AND SCIENCE CONTENT STANDARDS

All Ocean Institute programs are based around California Content Standards. The activities and investigations that your students participate in during the California Time Capsule Program coincide with the concepts being taught back in your classroom.

Here is a list of the general California History-Social Science and Science Content Standards that are included in the California Time Capsule Program.

### HISTORY-SOCIAL SCIENCE STANDARDS

#### **4.2 Students describe the social, political, cultural, and economic life and interactions among people of California from the pre-Columbian societies to the Spanish mission and Mexican rancho periods.**

1. Discuss the major nations of California Indians, including their geographic distribution, economic activities, legends, and religious beliefs; and describe how they depended on, adapted to, and modified the physical environment by cultivation of land and use of sea resources.
3. Describe the Spanish exploration and colonization of California, including the relationships among soldiers, missionaries, and Indians.
4. Describe the mapping of, geographic basis of, and economic factors in the placement and function of the Spanish missions; and understand how the mission system expanded the influence of Spain and Catholicism throughout New Spain and Latin America.
5. Describe the daily lives of the people, native and nonnative, who occupied the presidios, missions, ranchos, and pueblos.
6. Discuss the role of the Franciscans in changing the economy of California from a hunter-gatherer economy to an agricultural economy.
7. Describe the effects of the Mexican War for Independence on Alta California, including its effects on the territorial boundaries of North America.
8. Discuss the period of Mexican rule in California and its attributes, including land grants, secularization of the missions, and the rise of the rancho economy.

### SCIENCE STANDARDS

#### Life Sciences

- 2.a. Students know plants are the primary source of matter and energy entering most food chains.
- 2.b. Students know producers and consumers (herbivores, carnivores, omnivores, and decomposers) are related in food chains and food webs and may compete with each other for resources in an ecosystem.
- 2.c. Students know decomposers recycle matter from dead plants and animals.
- 3.a. Students know ecosystems can be characterized by their living and nonliving components.
- 3.b. Students know that in any particular environment, some kinds of plants and animals survive well, some survive less well, and some cannot survive at all.

- 3.c Students know many plants depend on animals for pollination and seed dispersal, and animals depend on plants for food and shelter.

Investigation and Experimentation

- 6.a. Students will differentiate observation from inference (interpretation) and know scientists' explanations come partly from what they observe and partly from how they interpret their observations.
- 6.b. Students will measure and estimate the weight, length, or volume of objects.
- 6.c. Students will formulate and justify predictions based on cause-and-effect relationships.
- 6.d. Students will conduct multiple trials to test a prediction and draw conclusions about the relationships between predictions and results.
- 6.e. Students will construct and interpret graphs from measurements.
- 6.f. Students will follow a set of written instructions for a scientific investigation.

