



CORRELATIONS TO THE CALIFORNIA STATE STANDARDS

The Official Captain Hydro Water Conservation Workbook

The Natural Water Cycle

Science – Fourth Grade

3a. Students know ecosystems can be characterized by their living and nonliving components.

Science – Fifth Grade

3b. Students know when liquid water evaporates, it turns into water vapor (invisible) in the air and can reappear as a liquid when cooled, or as a solid if cooled below the freezing point of water.

3c. Students know water moves in the air from one place to another in the form of clouds or fog, which are tiny droplets of water or ice, and falls to the Earth as rain, hail, sleet or snow.

4b. Students know the influence of the ocean on weather, and the role of the water cycle on weather.

Science – Sixth Grade

3a. Students know energy can be carried from one place to another by heat flow.

3c. Students know heat flows in solids by conduction and in fluids by conduction and also by convection.

4a. Students know the sun is the major source of energy for phenomena on the Earth's surface, powering winds, ocean currents, and the water cycle.

6b. Students know different natural energy and material resources, including air, soil, rocks, minerals, petroleum, fresh water, wildlife, and forests, and know how to classify them as renewable or nonrenewable.

The Built Water Cycle

Science – Fourth Grade

3a. (see above)

Social Science – Fourth Grade

4.4.6 Students explain how California became an agricultural and industrial power by tracing the transformation of the California economy and its political and cultural development since the 1850's, in terms of California's water system and how it evolved over time into a network of dams, aqueducts and reservoirs.

Science – Fifth Grade

3b, 3c, 4b. (see above)

Science – Sixth Grade

3a, 3c, 4a, 6b. (see above)

Water Purification

Science – Fourth Grade

- 6b. Students will measure and estimate the weight, length, or volume of objects.
- 6f. Students will follow a set of written instructions for a scientific investigation.

Science – Fifth Grade

- 3d. Students know that the amount of fresh water located in rivers, lakes, underground sources, and glaciers is limited and that its availability can be extended by recycling and decreasing the use of water.
- 6f. Students will select appropriate tools and make quantitative observations.

Science – Sixth Grade

- 6b. (see above)
- 7b. Students will select and use appropriate tools and technology to perform tests, collect data, and display data.

Science – Seventh Grade

- 7a. Students will select and use appropriate tools and technology to perform tests, collect data, and display data.
- 7d. Students will construct scale models, maps, and appropriately labeled diagrams to communicate scientific knowledge.

Wastewater Treatment

Science – Fifth Grade

- 3d. (see above)
- 3e. Students know the origin of water used by their local communities.

Science – Sixth Grade

- 6b. (see above)

The Need For Water

Science – Fifth Grade

- 2a. Students know many multicellular organisms have specialized structures to support the transport of materials.
- 2d. Students know the role of the kidney in removing cellular waste from blood and converting it into urine, which is stored in the bladder.
- 2f. Students know plants use carbon dioxide (CO₂) and energy from sunlight to build molecules of sugar and release oxygen.

Science – Sixth Grade

- 5a. Students know energy entering ecosystems as sunlight is transferred by producers into chemical energy through photosynthesis and then from organism to organism through food webs.

Home Water Use

Science – Fifth Grade

- 3d. (see above)

Science – Sixth Grade
6b. (see above)

Measuring Water Use, Reading Your Water Bill, Water Quality/Water Testing

N/A – all grades

Water And Industry

Science – Sixth Grade

6c. Students know the natural origin of the materials used to make common objects.

Water At Work

Social Science – Fourth Grade

4.1.3 Students demonstrate an understanding of the physical and human geographic features that define places and regions in California. by identifying the state capitol and describing the basic regions of California, including how their characteristics and physical environment affect human activity (e.g., water, landforms, vegetation, climate).

4.1.4 Students demonstrate an understanding of the physical and human geographic features that define places and regions in California. by identifying the location of, and explaining the reasons for, the growth of towns in relation to the Pacific Ocean, rivers, valleys, and mountain passes.

4.4.6 (see above)

Drought Days Simulation, Ground Water, Water and Cities, Wagon Train Simulation

Science – Fifth Grade

3d. (see above)

Science – Sixth Grade

6b. (see above)