Visual Aids

California Education and the Environment Initiative

2

Science Standards 2.2.e. and 2.2.f.

Supports ELA Standard: Reading 2.1.10.

Flowering Plants in Our Changing Environment

California Education and the Environment Initiative

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Key Partners:

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VA #1 Parts of an Orange Tree

VA #2 Ways People Use Apples

In spring, apple trees have flowers.

The fruit grows on apple trees in spring and summer.

Apples are a healthy food for people and some animals. We eat more apples than any other fresh fruit.

Many apple trees grow in orchards. Each tree bears many apples.

VA #3 Ways People Use Cotton

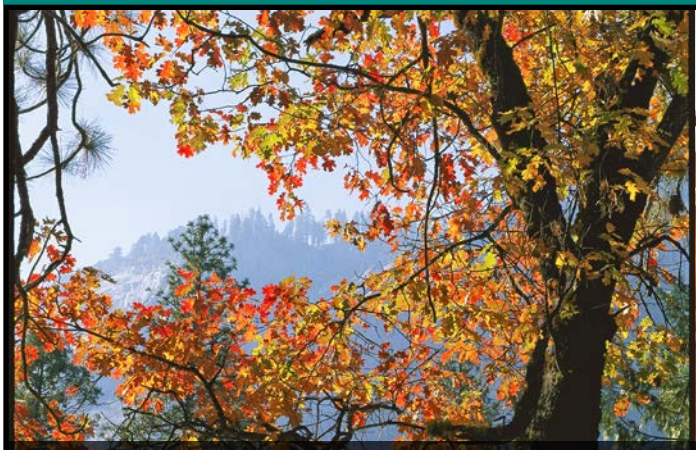
Cotton plants are grown in large fields. The middle part of cotton flowers become the fruit, called a boll.

Its long, strong fibers make fine clothes, sheets and rope. It takes cotton from 50 bolls to make a T-shirt.

The oil from its seeds is used for cooking. The dry part of the seed is fed to cattle and other animals.

Cotton bolls hold “hairy” seeds that bear the fibers we use. Cotton seeds grow more cotton plants, too.

VA #4 Ways People Use Oak



California black oaks in flower. Many black oak trees grow in California.

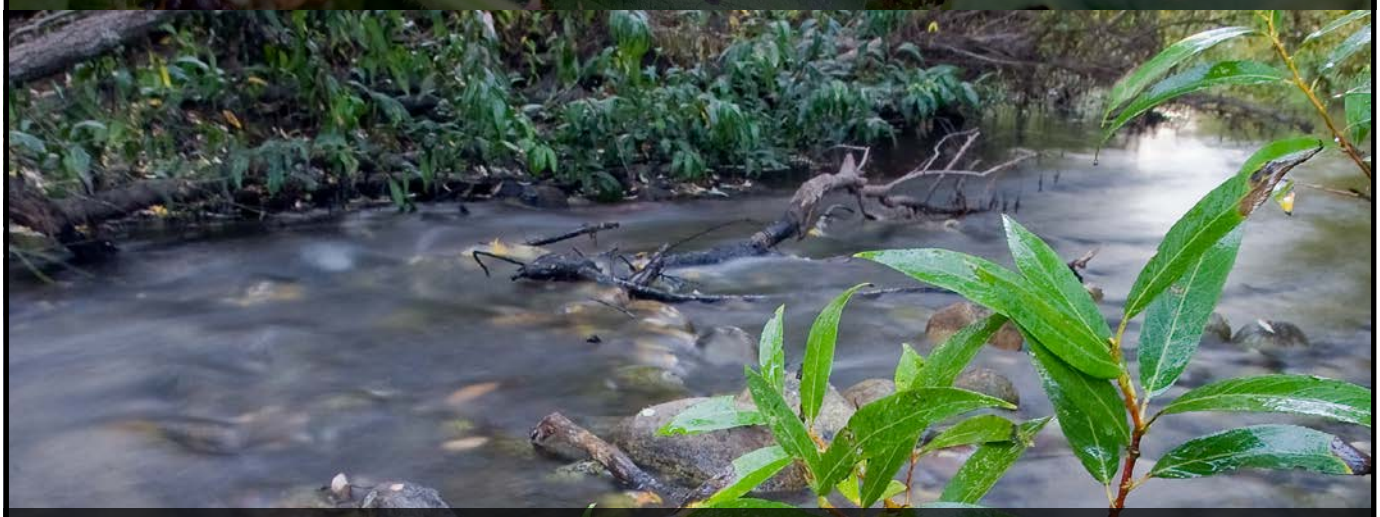
Oak dining table and chairs. Oak wood is used to make houses, tables, chairs, and many other things.

Oak wood in a wood-burning stove. People burn wood to stay warm.

The fruit of an oak tree is an acorn. Each acorn has a seed inside.

VA #5 What Blackberries Need and Where They Get It 1

Blackberry bushes grow in woodland ecosystems. They need four things to grow: **water or moist soil, sunlight, shade, and space.**



Blackberries need a lot of **water** to grow and produce berries with seeds. They also need moist soil.

VA #6 What Blackberries Need and Where They Get It 2

Like all plants, blackberries need **sunlight** to make food and a lot of berries with seeds. They also need some **shade** so that the soil they grow in does not get too dry.

Blackberry plants spread out as they grow so they need lots of **space.** They grow best where other plants do not crowd them.

VA #7 Not Enough Water

Oaks During a Drought
This is a valley oak tree.
A large oak tree needs hundreds of gallons of water a day.
During a drought, the soil around the oak dries up fast.
To keep from losing water, the tree's leaves wilt and turn brown.
If the leaves fall off too soon, the tree cannot make food.
It gets weaker. It does not grow much.
It does not grow many acorns.

What can happen to oak trees during a long drought?

VA #8 Too Much Water

Cottonwood Trees During a Flood
Cottonwood trees grow near stream banks. Streams flood when too much rain falls or snow melts too fast.
A flood can wash soil away from the roots of trees. Some trees may fall over.
Some trees may die. Floating dead trees can crash into and hurt standing trees.
Water that stays for a few days will hurt the trees. It keeps air away from their roots. Then, small trees may lose their leaves and cannot make food.

What can happen to cottonwood trees during a big flood?

VA #9 When Temperatures Change

Orange Trees During a Frost

Orange trees can have fruit and flowers at the same time.
When it gets very cold and the temperature goes below freezing, frost can form on the oranges on the tree. They are no longer good to eat.
Then, the flowers fall off. The leaves curl up and turn yellow.
New shoots turn dark and fall off.

What can happen to young orange trees during a frost?

VA #10 People and Plants

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