

cochineal

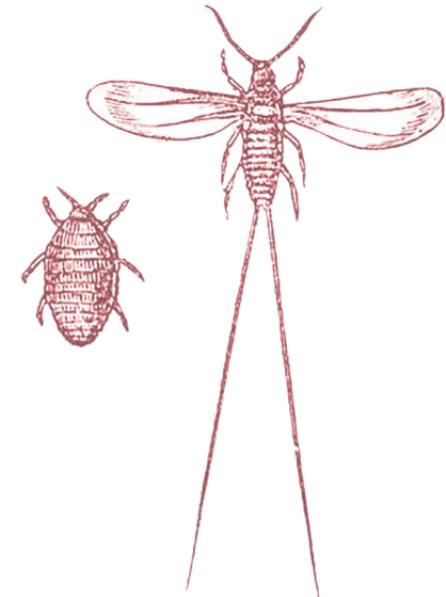
coch-i-neal
\\ kä-CHē-nēl \\

noun

Dactylopius coccus

Cochineal is an insect native to tropical and subtropical America that parasitizes prickly pear cactus. Highly prized because of the vibrant red color it produces, it is frequently used in textile and fiber dying as well as in foods and cosmetics. The red dye is produced from the dried, pulverized bodies of the female insects. Cochineal is used to produce scarlet, crimson, orange, and other red hues and produces pigments such as carmine. The dye was introduced into Europe from Mexico, where it had been used long before Spanish colonization. Cochineal has been replaced almost entirely by synthetic dyes, but it continues to be used today to color cosmetics and beverages. Its dyeing power is attributed to cochinealin, or carminic acid.

Cochineal is derived from the French "cochenille", derived from Spanish "cochinilla", in turn derived from Latin "coccinus" meaning "scarlet-colored", or from the Latin "coccum", meaning "berry yielding scarlet dye." It is called nocheztl in Náhuatl, an indigenous language in Mexico, meaning 'blood of the prickly pear.' In Zapotec it translates to bee and in Mixteco it is called *nduco*.



How many
names are
there for
red?

indigo

in·di·go
/ɪn'de,gō/

noun

Indigofera tinctoria

Indigo is a blue dye derived from a plant that grows around the world. Indigo is among the oldest dyes to be used for textiles and printing, and didn't arrive in Europe until the 16th century when it drastically changed the global trade. Because of its high value as a commodity, indigo was often referred to as blue gold. It was so common that Isaac Newton added indigo as the sixth primary color in his revised description of the rainbow in 1675.

Today, indigo is still used worldwide for blue jeans, although natural indigo was replaced in 1880 with the development of a synthetic dye.

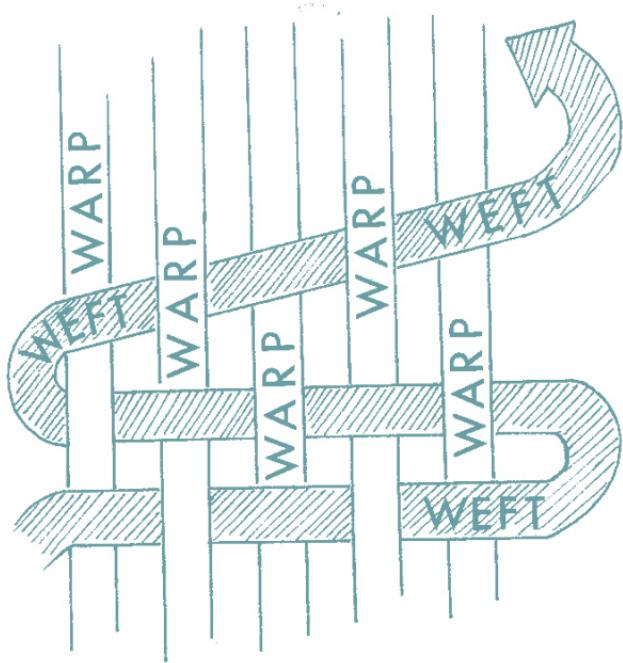
The color blue is ubiquitous in our world, coloring the sky and the ocean. However, it was one of the last colors to be named. Some scientists believe that ancient humans were colorblind and could only recognize black, white, red, and only later yellow and green. As a result, early humans had no concept of the color blue and in turn no words to describe it. This is also reflected in ancient literature, such as Homer's *Odyssey*, that describes the ocean as a "wine-red sea."



When was
the first time
you saw
blue?

weaving

Weaving is a technique used to create many types of fabric, including textiles, rugs and blankets. Fibers used in weaving vary greatly, in fact anything that can be twisted or spun into a yarn or thread can theoretically be used, but common fibers are wool, silk, hemp, and cotton. Fibers that run longitudinally are referred to as the *warp* and the fibers which run crossways are referred to as the *weft*. The way the warp and weft combine is called the weave; twill and plain weave are the two most common patterns. Weaving is done on looms; there are multitudes of loom types. All fabrics are woven, from sheets to clothing to sails of ships. With the industrial revolution, weaving moved to factories and looms became mechanized. Today, in factories, computerized looms called Jacquard looms are used for quicker and more efficient production.



How were
your clothes
woven?

synesthesia

syn·es·the·sia
/ ,sīnəs'THēZHēə/
noun

Synesthesia is a perceptual phenomenon in which one sense is simultaneously perceived by different senses, like seeing sound or hearing colors.

In one of the most common forms of synesthesia, letters and numbers are “shaded” or “tinged” with a color. While different individuals usually do not report the same colors for all letters and numbers, studies with large numbers of synesthetes find some commonalities across letters (e.g. A is likely to be red).

Another common form of synesthesia is the association of sounds with colors. For some, everyday sounds such as doors opening, cars honking, or people talking can trigger seeing colors. For others, colors are triggered when they hear certain musical notes.



What
would
yellow
sound like?

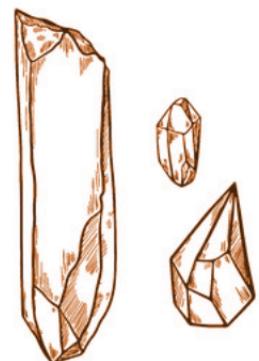
mineral pigments

Earth pigments are naturally occurring minerals, mainly iron oxides, that people have used in paints and dyes for thousands of years. These natural colors are found in rocks and soils around the world. Different combinations of minerals create vibrant colors that are unique to regional landscapes. Some mineral pigments are roasted in order to intensify their color. These pigments include ochres, sienna, and umbers.

Ochres come from naturally tinted clay containing mineral oxides. Among the oldest pigments known to humankind, ochres have been used by Indigenous communities for painting, body decoration, ceremonial practices, and the preservation of animal skins. Ochres are a range of yellows, golds, and reds.

Sienna is a form of limonite clay. The pigment was first used in Italy in prehistoric times. The unique color is derived from ferric oxides. The name refers to Siena, Italy, where the pigment was originally extracted. Sienna is a rich, earthy red.

Umbers are clay pigments that contain iron and manganese oxides. The name is said to be derived from the Latin word *umbra* (shadow) or from the mountainous Italian region of Umbria, where umber was originally found. Darker in color than ochres and sienna, umbers range from a light cream color to dark brown.



What
shades
are
New Mexico?