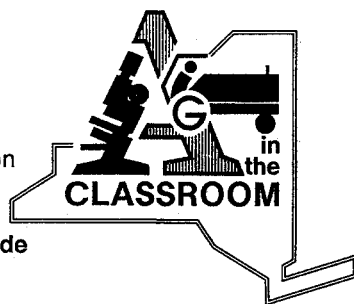


The Source

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Graphics by - **Catharpin Studio**



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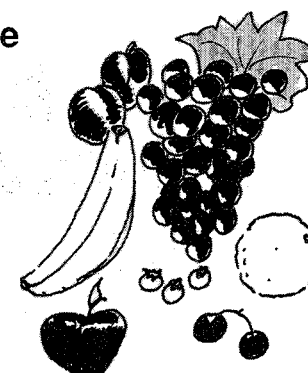
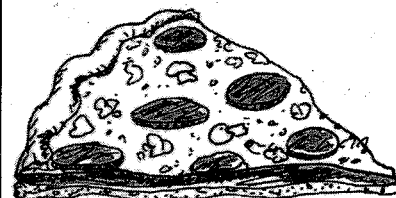
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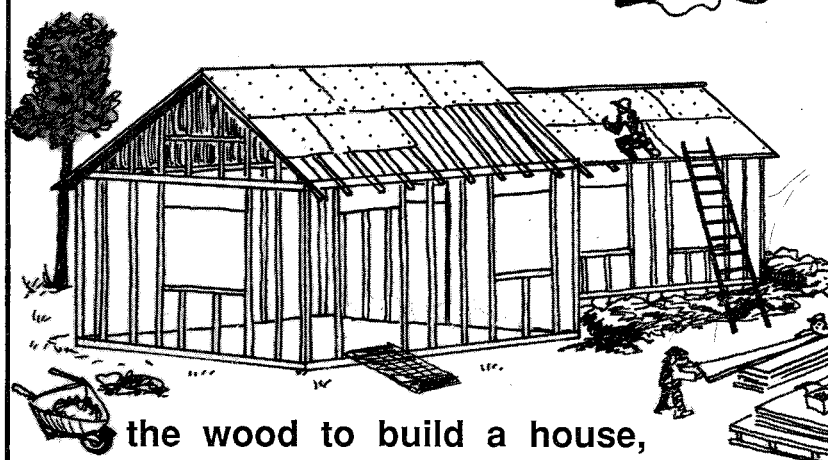
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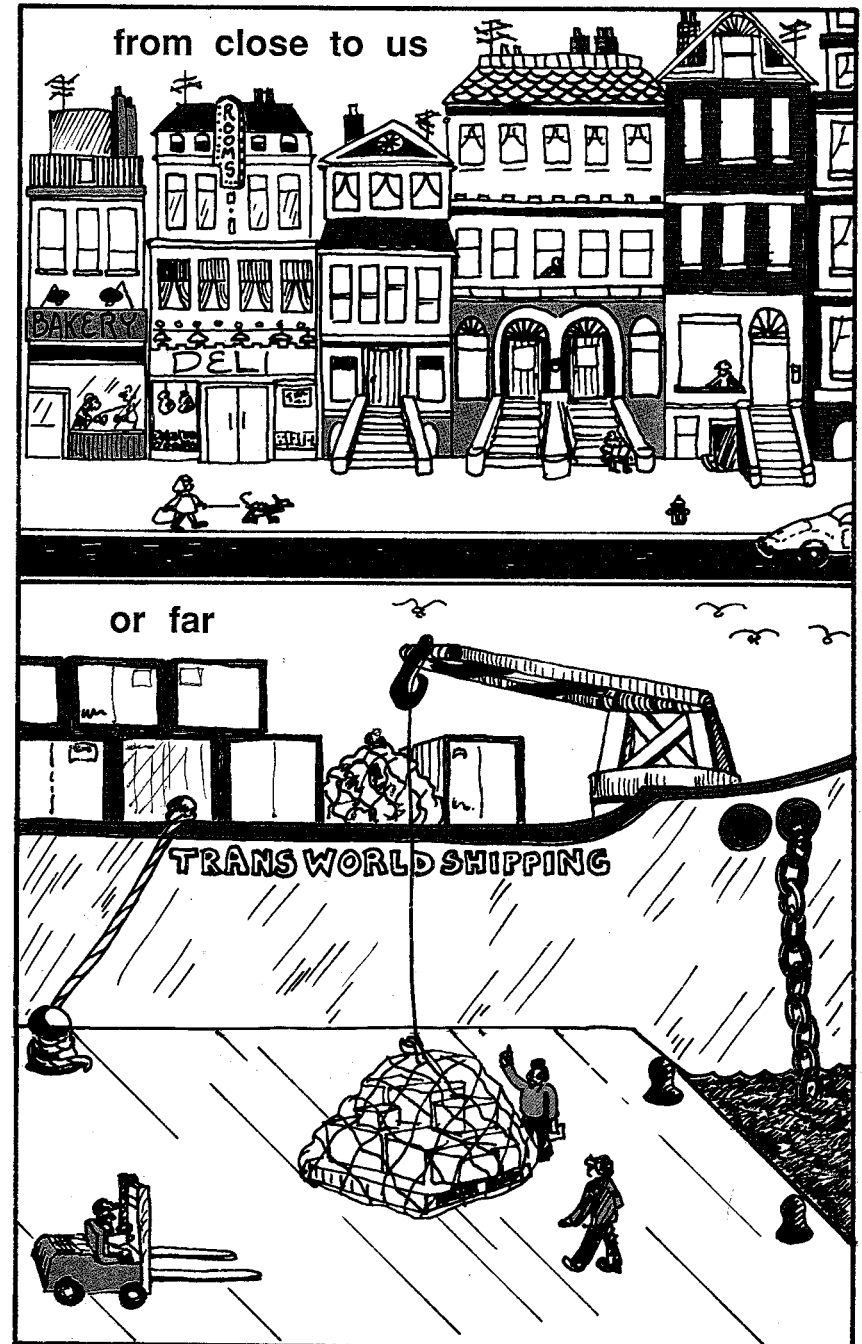
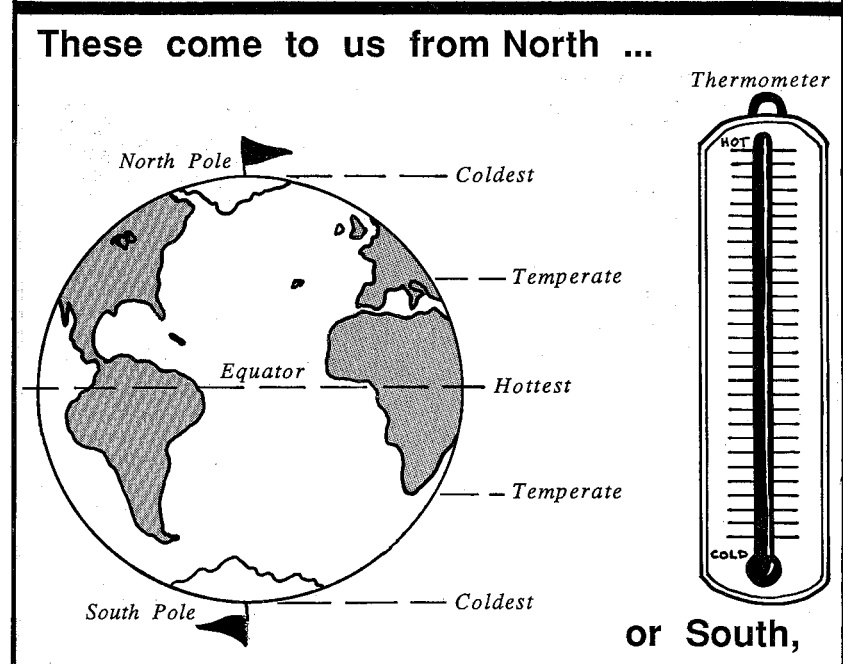
The food we eat,



the clothes we wear,



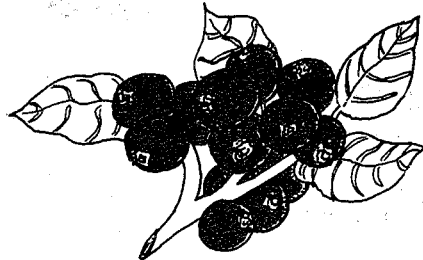
the wood to build a house,



through hands of many people, from what we'll call the source.



Well, what's the source of blueberries?



Blueberries grow on a bush.

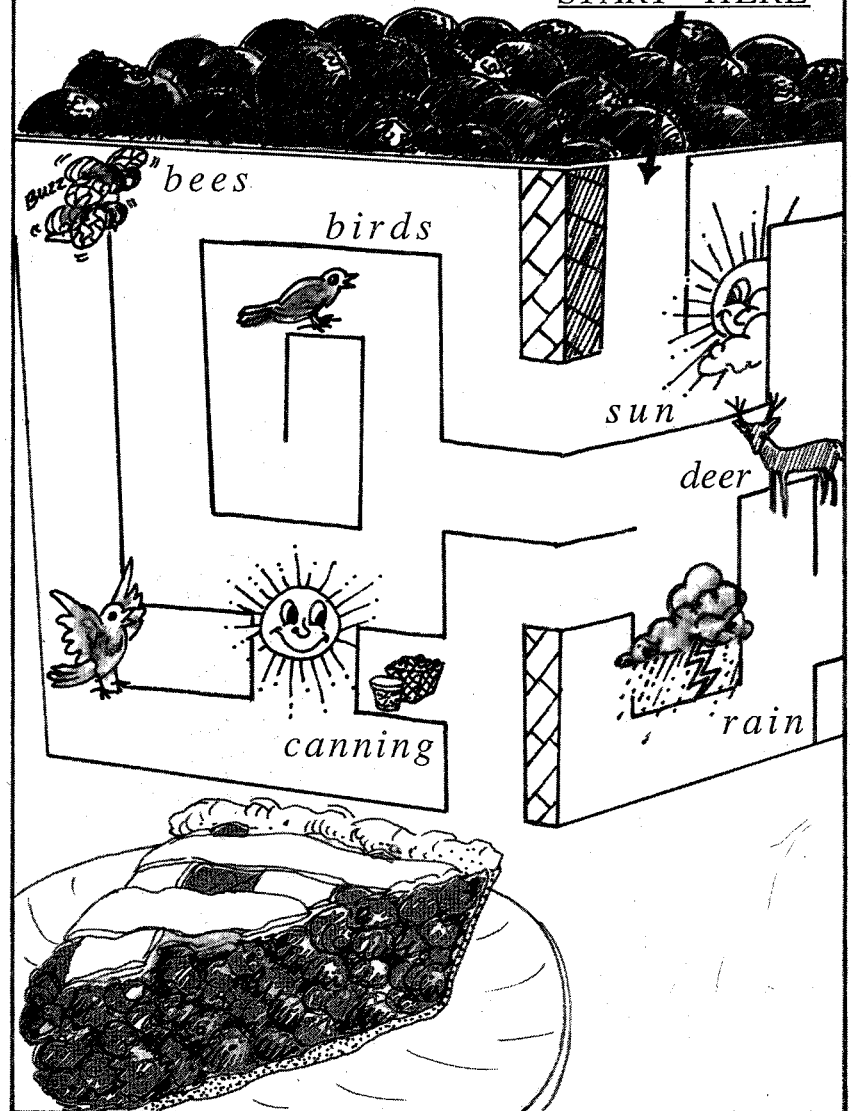


A low bush

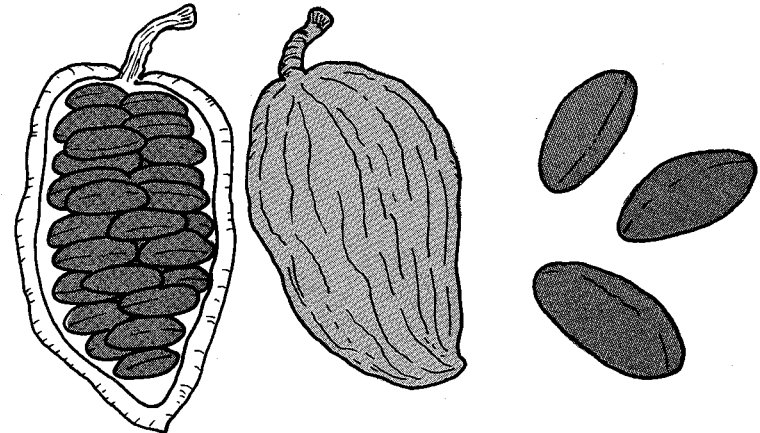
or a high bush....

but, a bush it is indeed.

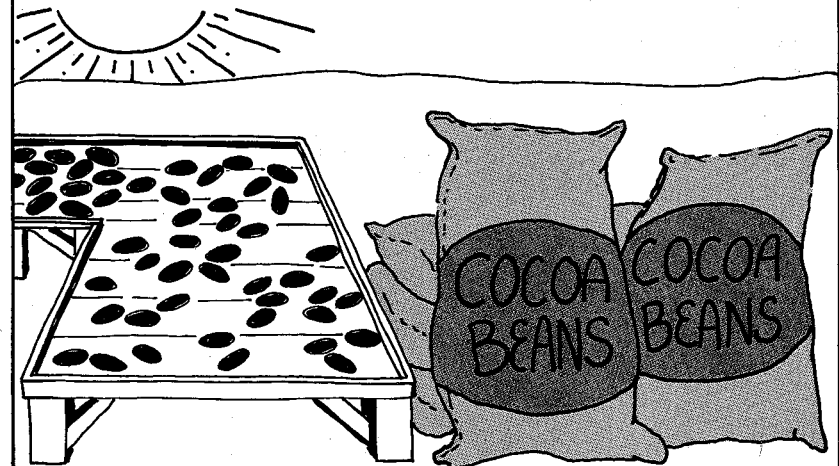
Find your way to the blueberry pie by traveling through the blueberry maze. Stop at each stage which helps to make the pie. But be careful! The birds and deer may stop you. START HERE



Chocolate on the other hand....
begins upon a tree. *We make cocoa from the beans of the cacao tree.*

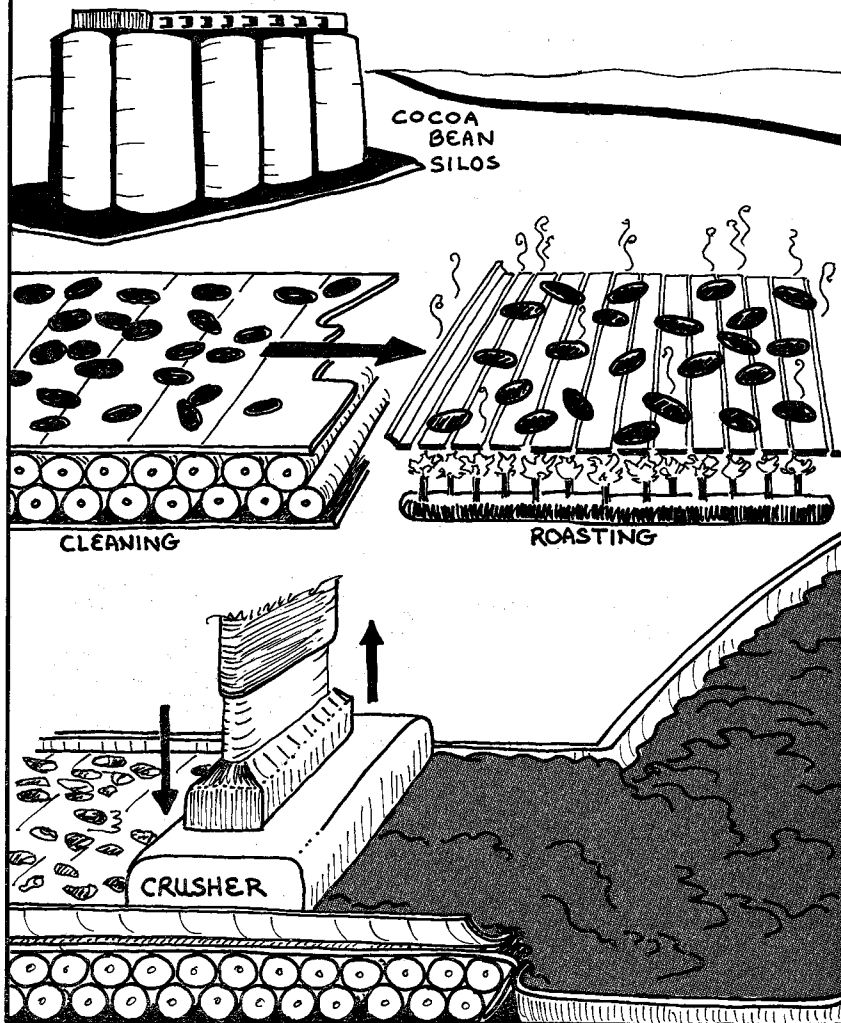


The cocoa beans are seeds which grow inside very hard pods on the tree. When ripe, the pods are picked and cut open. There are 20 to 50 beans inside which are surrounded by a milky white pulp.



The beans are separated, dried in the sun for a few days and put into large sacks. These sacks of cocoa beans go to factories in the United States for processing.

At the factory the beans are stored in large buildings called silos. When it is time to use the beans they are taken out of the silos to be cleaned, roasted and crushed. Crushing the center of the bean makes a thick liquid. This liquid is called chocolate liquor.



Sugar and vanilla are added to the liquor. As the liquor cools it makes sweet chocolate. This mixture is crushed between rollers called conches. It is crushed until it becomes smooth.

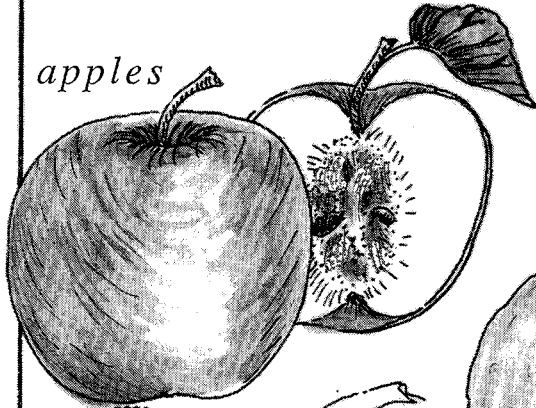


When milk is added, milk chocolate is made.

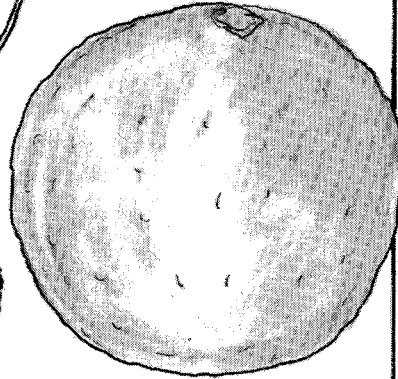


Fruits and nuts, we love to eat, grow on trees as well.

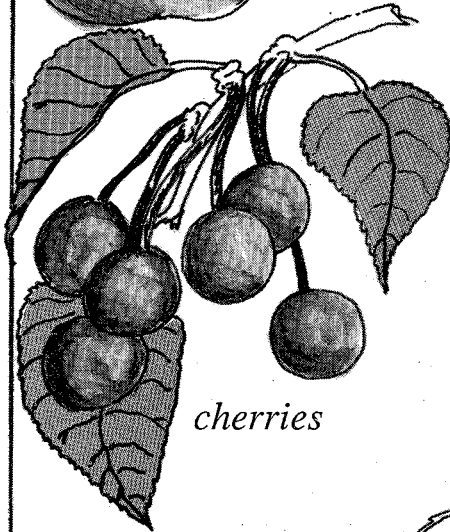
apples



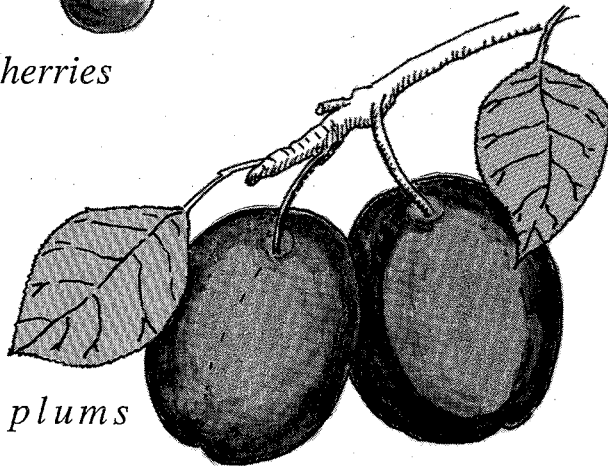
oranges



cherries



plums



But, everything that we call nuts aren't always nuts you know!



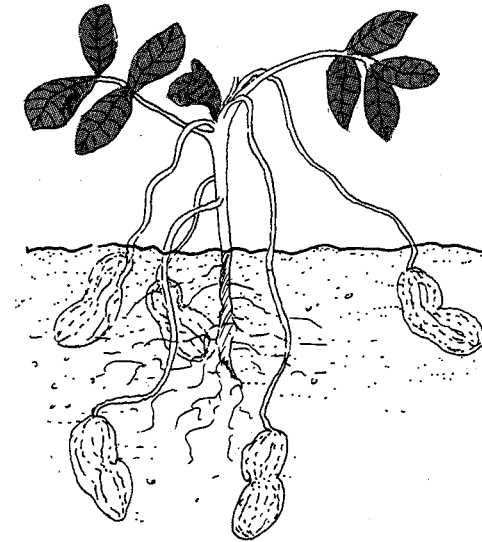
Peanuts are not nuts at all, they're really more like peas. The peanut plant is just a vine with peanuts underground.



The source of peanuts is underground?

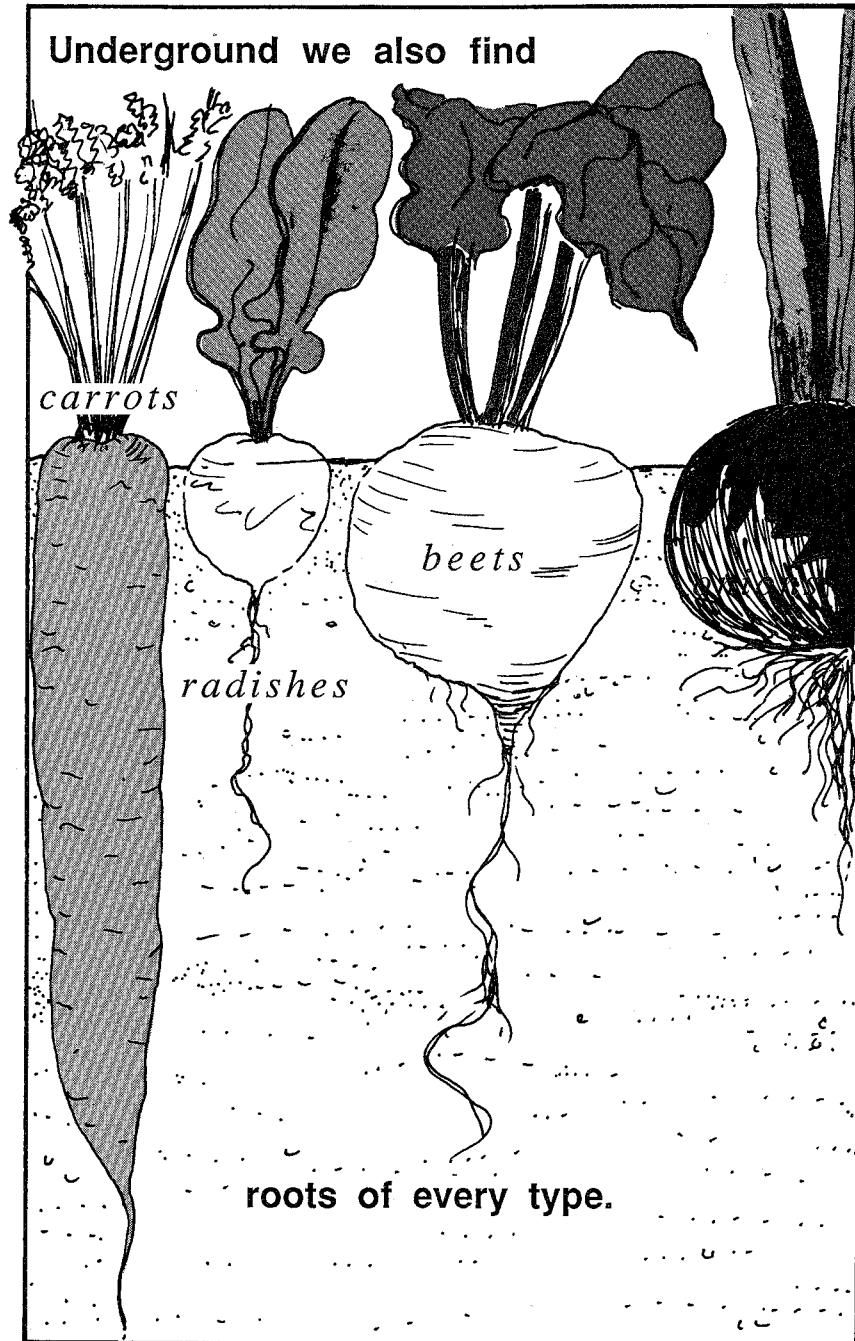


The peanut's flowers fertilize and grow into the ground.

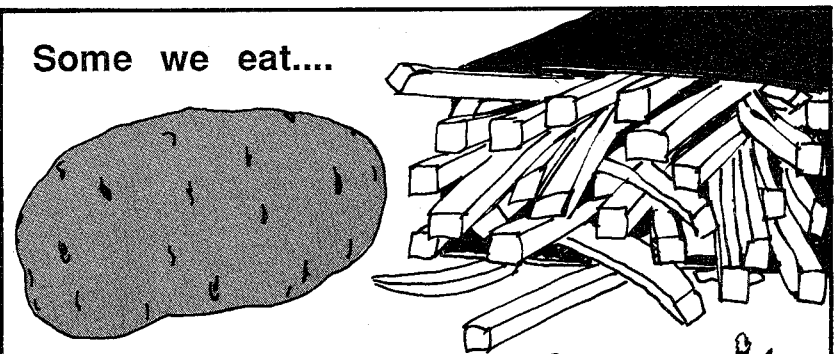


The peanut grows on pegs you see instead of on a tree.

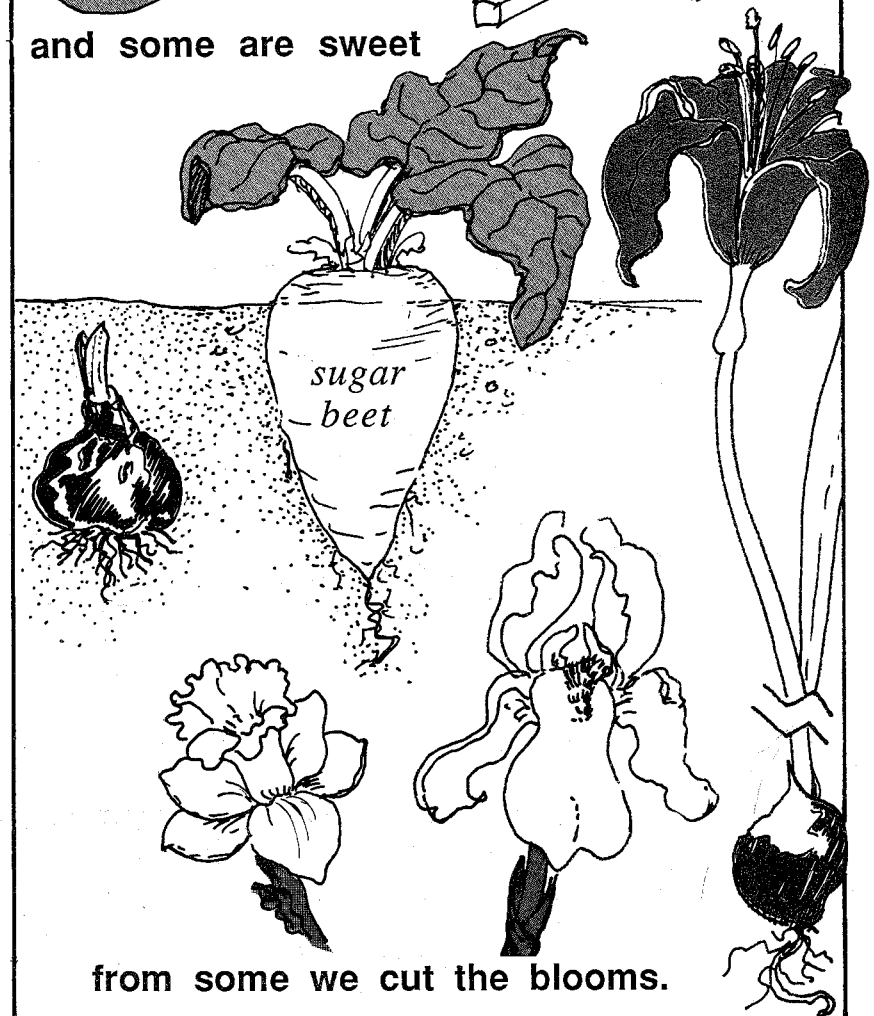
Underground we also find



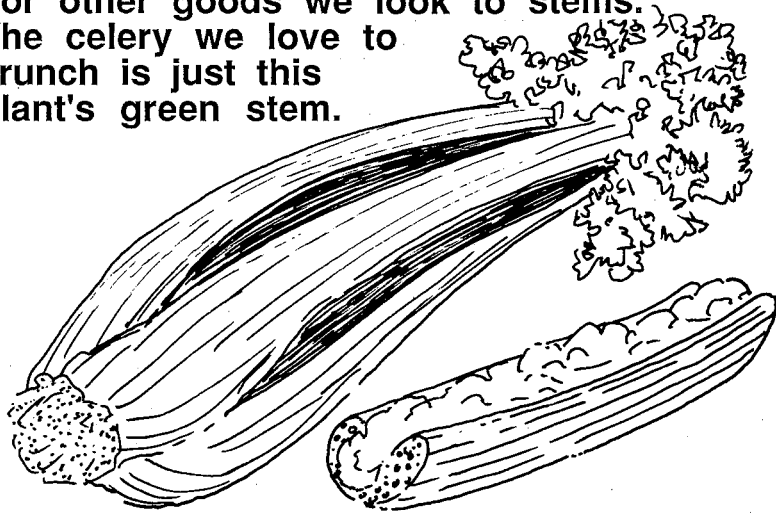
Some we eat....



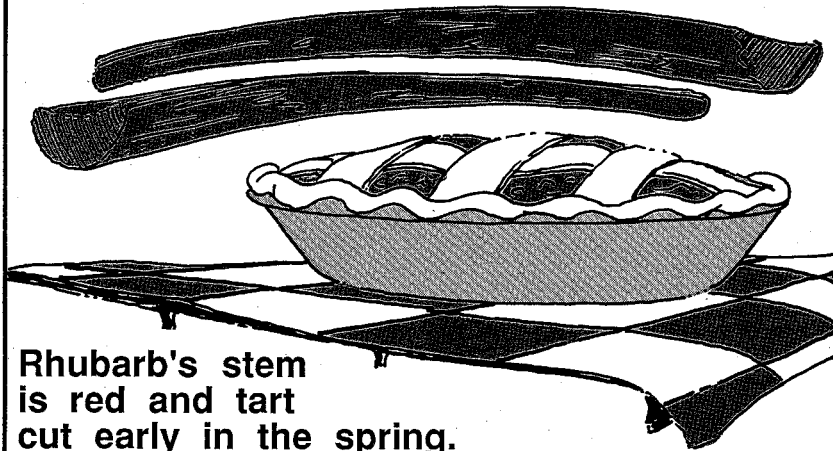
and some are sweet



For other goods we look to stems.
The celery we love to
crunch is just this
plant's green stem.

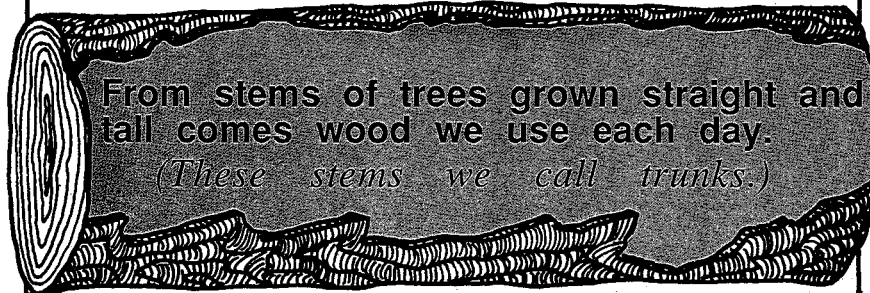


Rhubarb's stem
is red and tart
cut early in the spring.



From stems of trees grown straight and
tall comes wood we use each day.

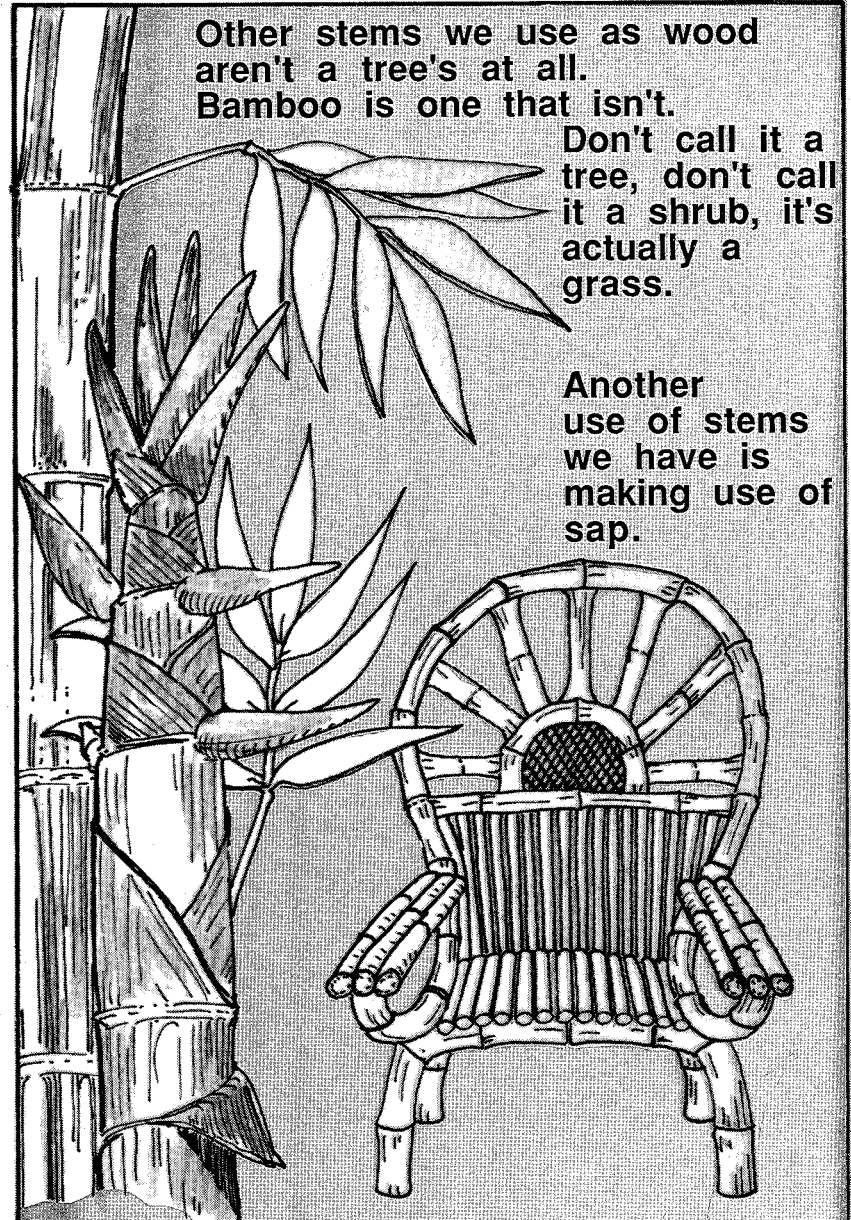
(These stems we call trunks.)



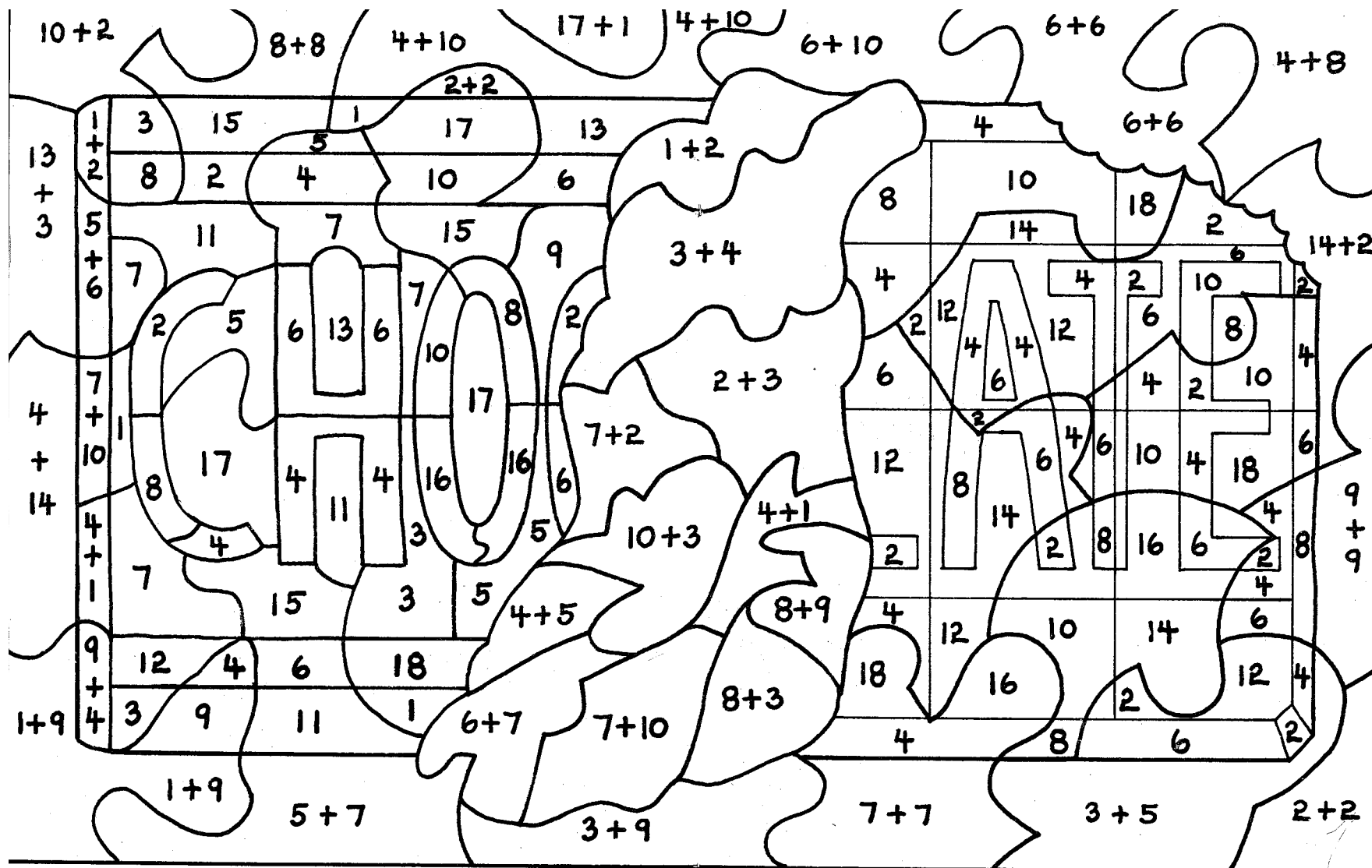
Other stems we use as wood
aren't a tree's at all.
Bamboo is one that isn't.

Don't call it a
tree, don't call
it a shrub, it's
actually a
grass.

Another
use of stems
we have is
making use of
sap.

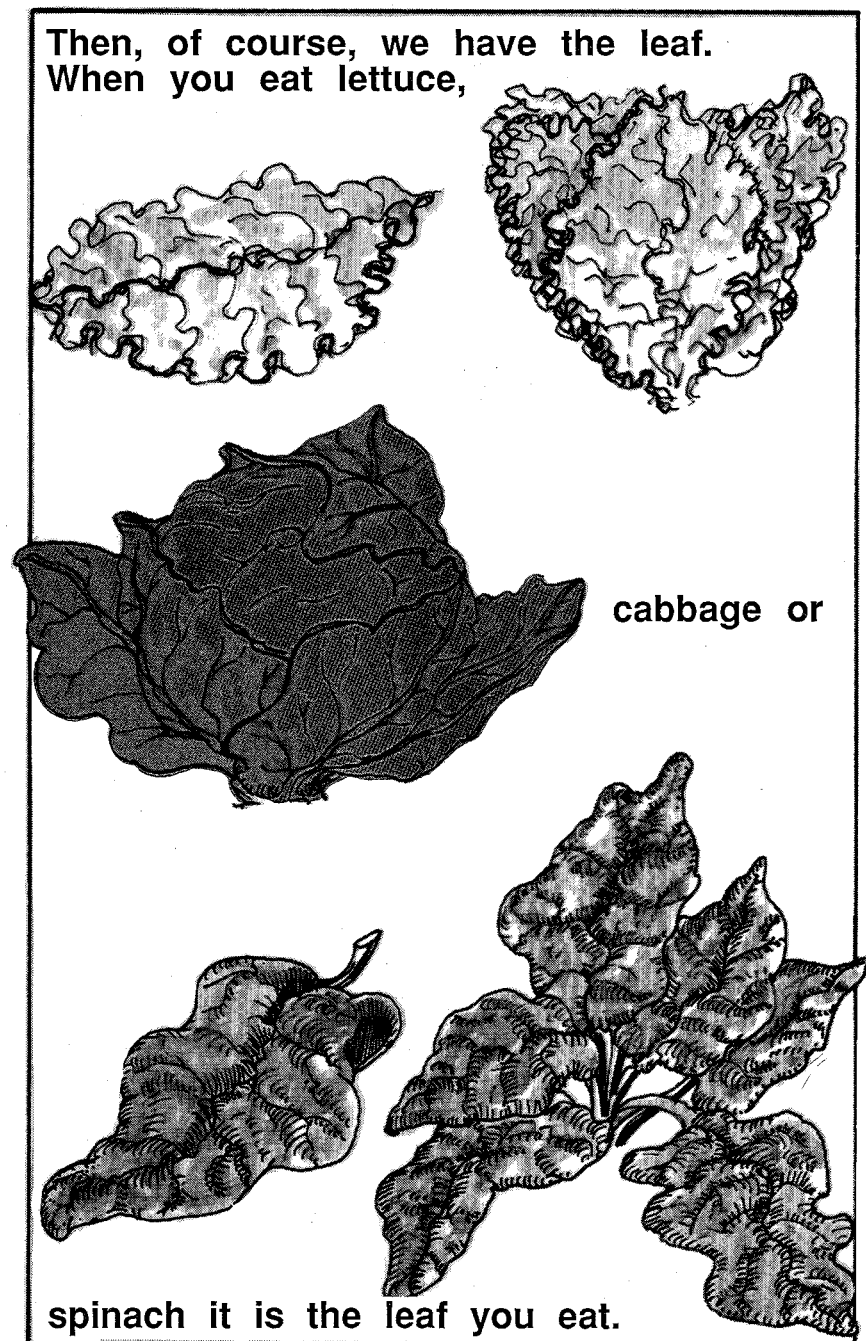
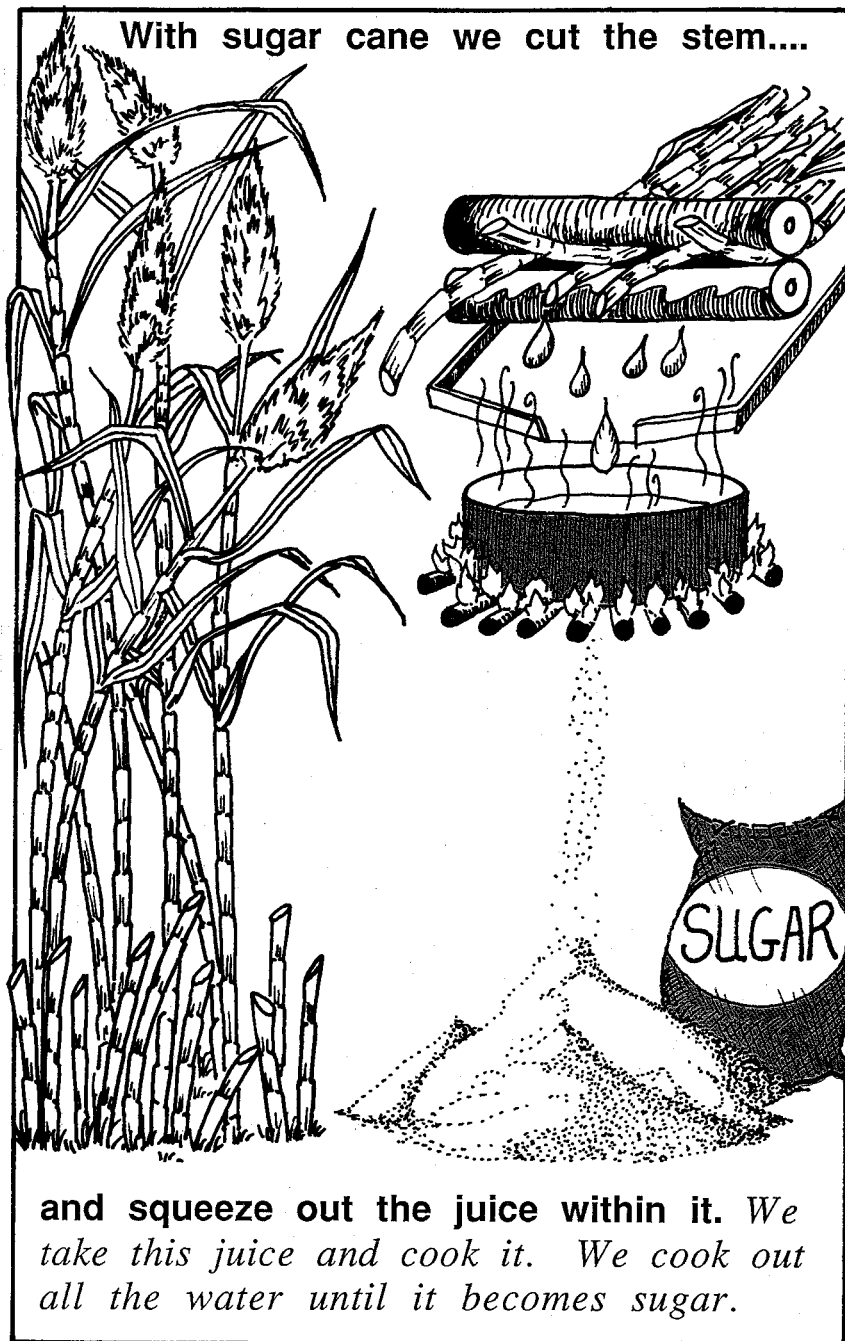


Real maple syrup and rubber come from
sap travelling up or down the tree.



(1.) Where there are single numbers color the ODD #'s YELLOW. Color the EVEN #'s BROWN.

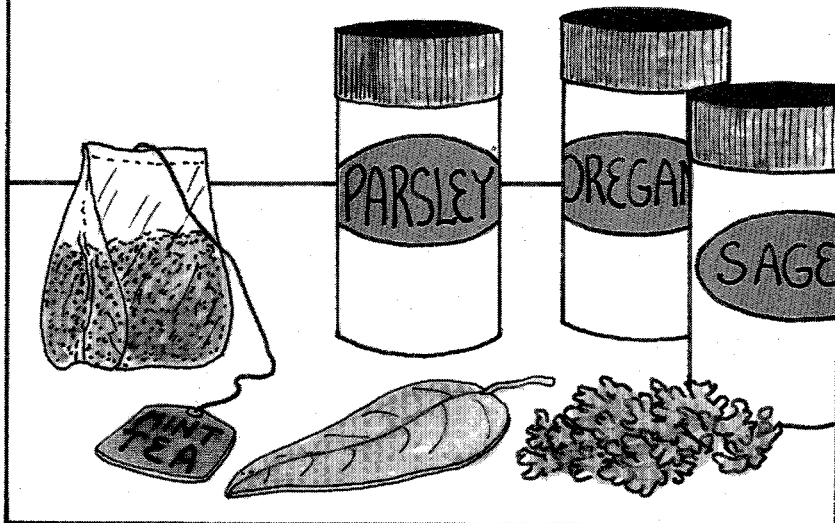
(2.) Where there are two numbers to be added color those with EVEN sums BLUE, and those with ODD sums WHITE.



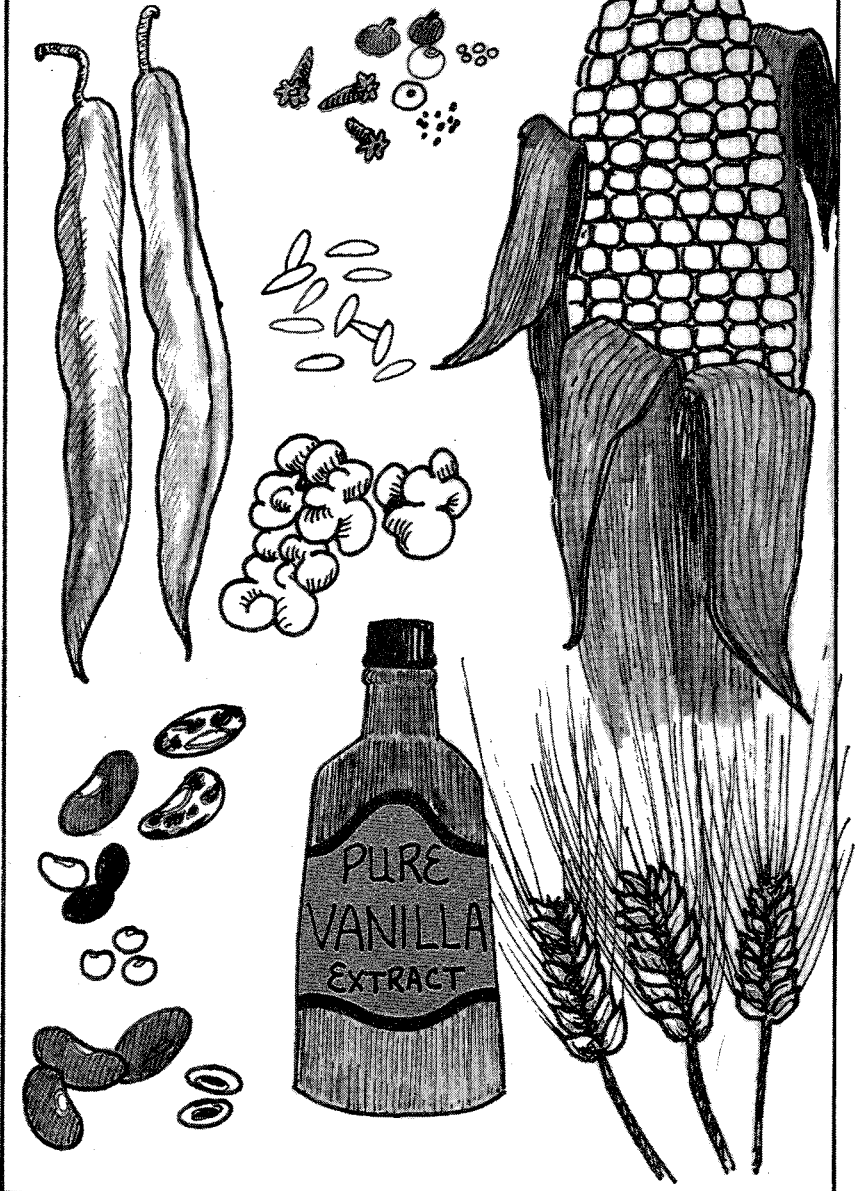
From leaves come oils for mints.



We also make tea, and flavorings for soup and other foods.

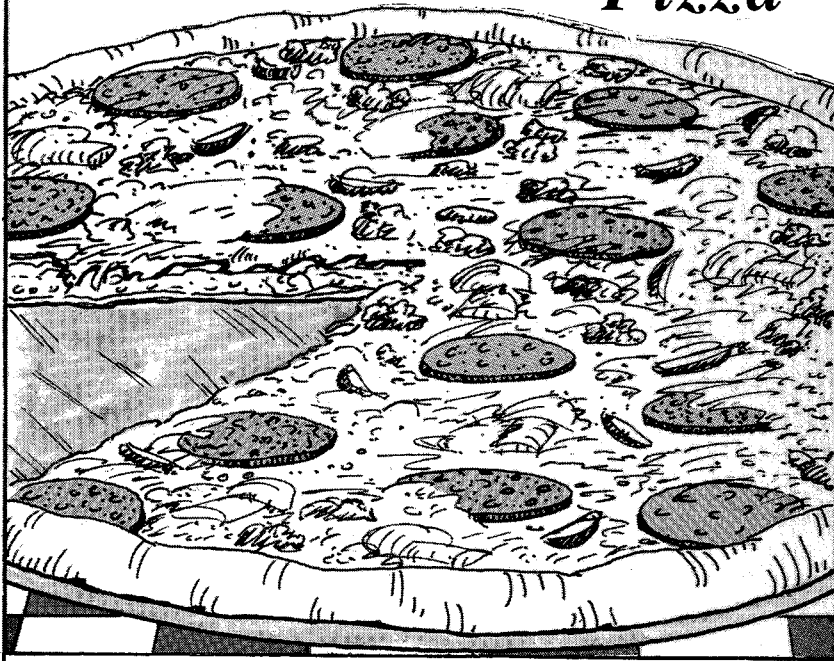


From seeds we get wheat, corn, beans, rice, popcorn, barley, spices, vanilla, and cocoa beans.



Let's take a look at one food and seek the sources of it.

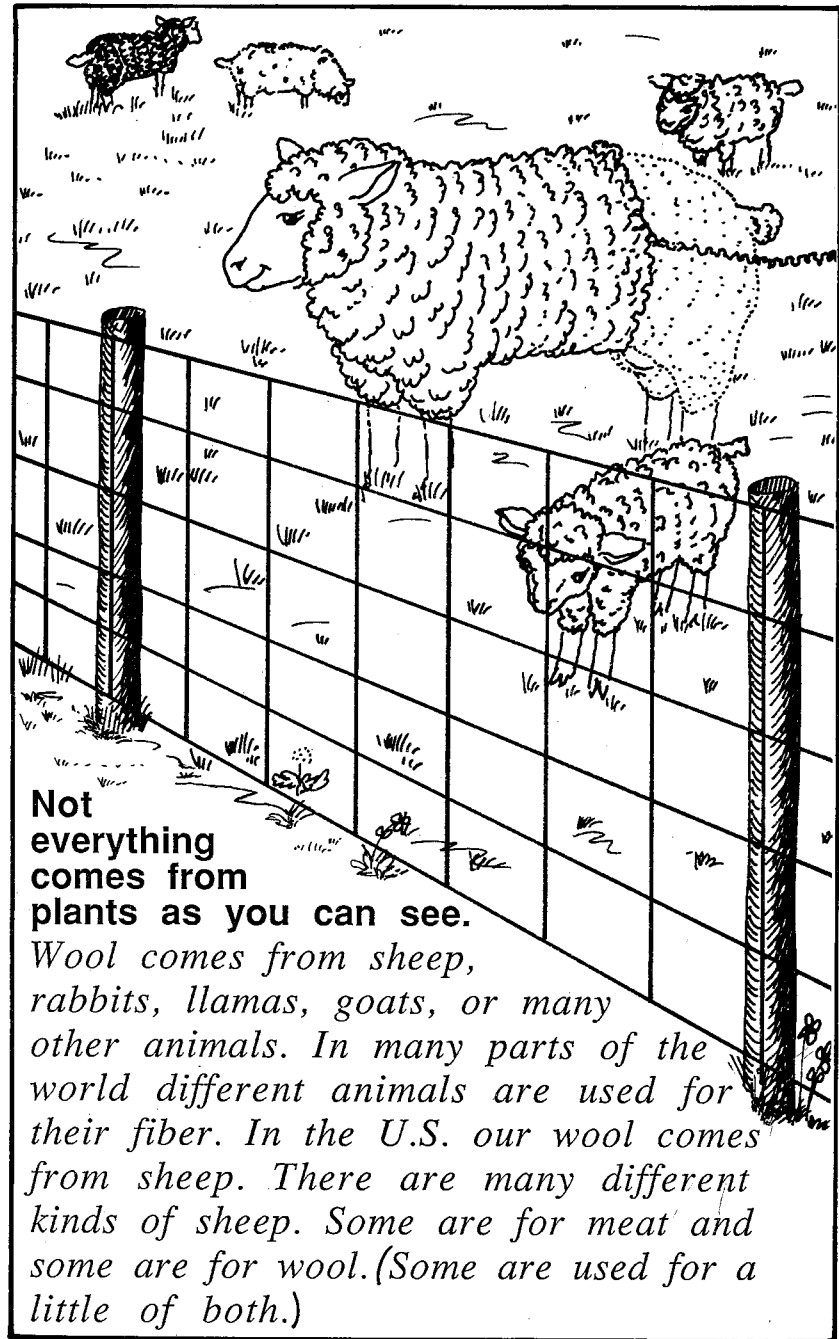
Pizza



The Dough
flour-wheat seed
yeast-fungus
water

The Sauce
basil-leaves
tomatoes-fruit of a vine
garlic-underground
olive oil-fruit of a tree

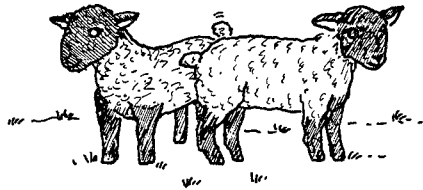
On Top Of The Sauce
sausage-pork
pepperoni-pork and beef
cheese-dairy cows
onion-underground
mushroom-fungus
peppers-fruit
oregano-leaves



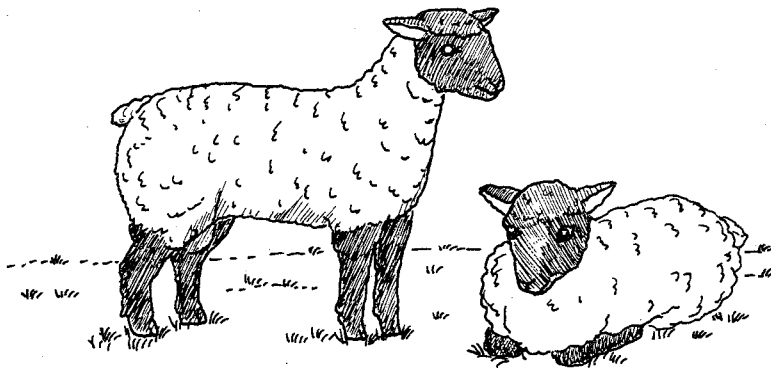
Not everything comes from plants as you can see.

Wool comes from sheep, rabbits, llamas, goats, or many other animals. In many parts of the world different animals are used for their fiber. In the U.S. our wool comes from sheep. There are many different kinds of sheep. Some are for meat and some are for wool. (Some are used for a little of both.)

Young sheep are called lambs. When two lambs are born at the same time, they are called twins.



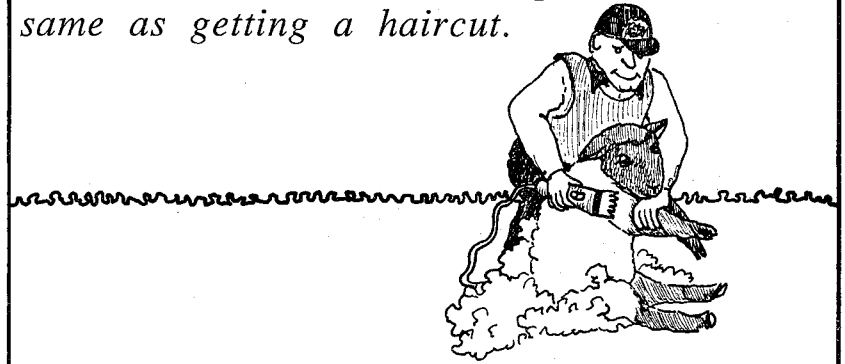
Their mother is called a ewe. Their father is a ram.



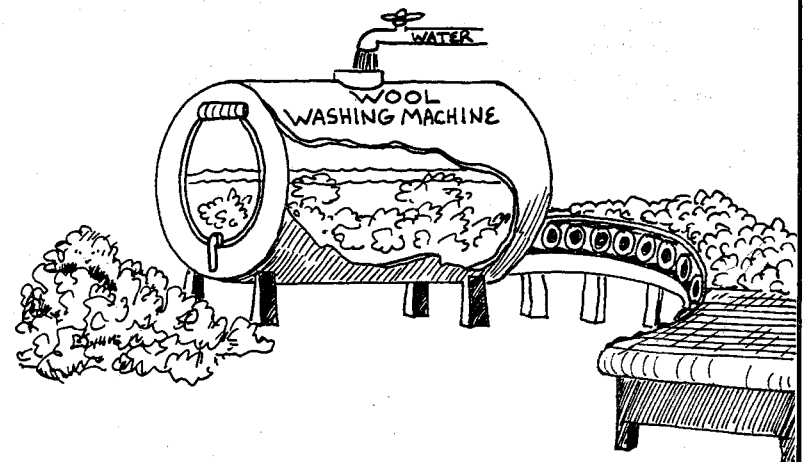
Sheep have special stomachs so they can eat grass. Can you eat just grass and live? A sheep can!

Sheep can also live with little water if they have to. So, sheep are often raised where other animals aren't like dry or mountainous land.

We shear sheep once a year, in the spring. The fleece is cut off with clippers. This does not hurt the sheep. It is the same as getting a haircut.

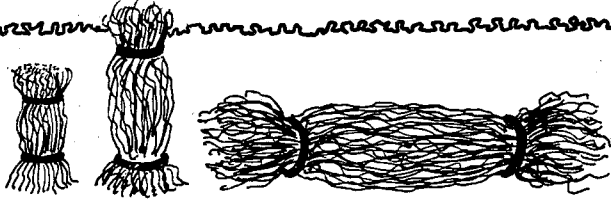


The fleece comes off in one large piece. It needs to be washed. A sheep's fleece contains grease to keep water out so that when it rains the sheep stays dry. Part of this grease is lanolin (lān'-ō-lin). Lanolin is used in hand cream.

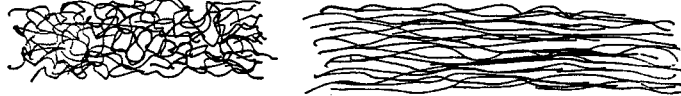


After the fleece is washed, it is carded.

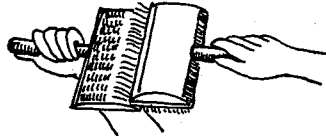
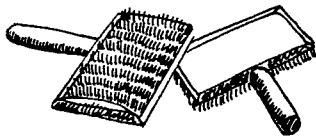
The fleece is made of many, many fibers. The fibers can be long or short. The longer the fleece is on the sheep, the longer the fibers will be. This is why a sheep is sheared only once a year.



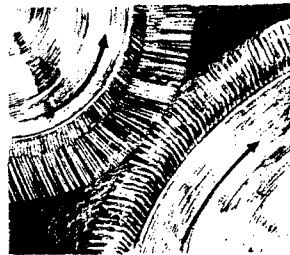
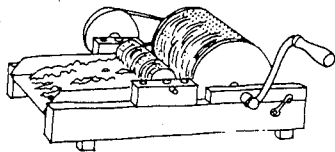
Carding makes all of the fibers line up in a row.



These are cards. One card is brushed against the other to pull the fibers straight like brushing or combing hair. In the past all fibers were combed by hand.

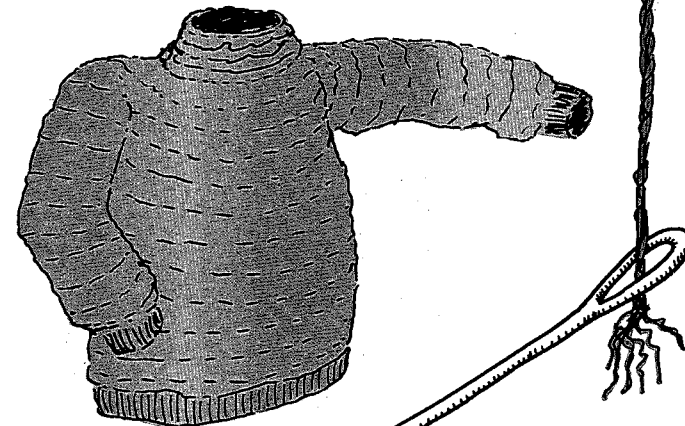
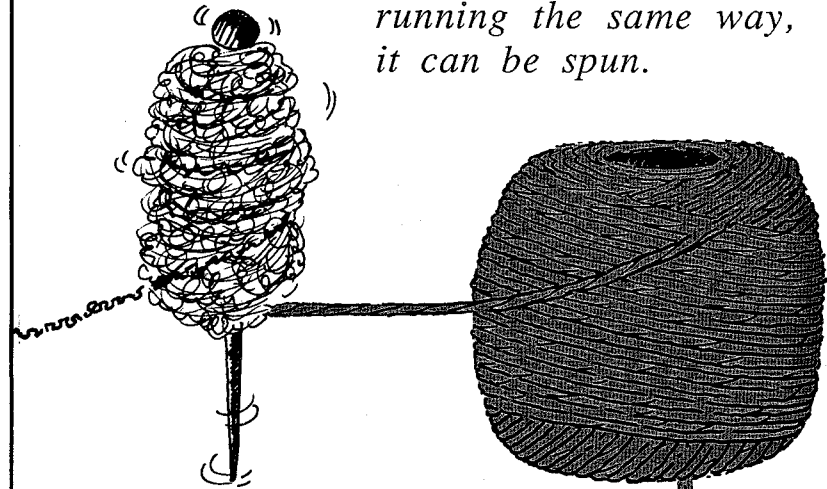


Then the drum card was made. But this was still turned by hand. Today large machines do the carding.



Carding Cylinders

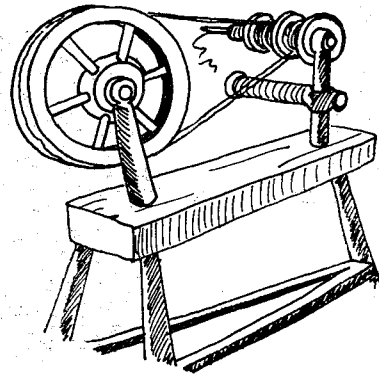
Once all the fibers are running the same way, it can be spun.



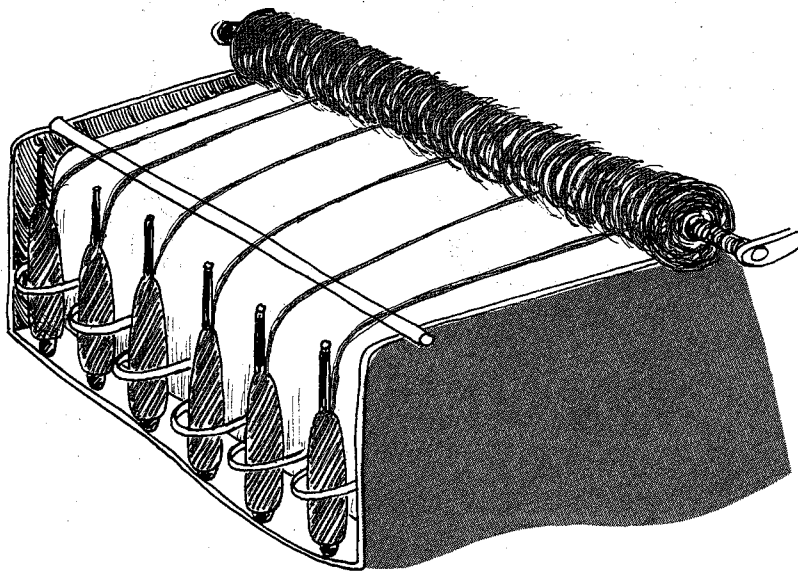
Twisting the fiber is spinning. This spinning uses a drop spindle.

This speeds up the twisting. In some countries it is still used and spinning is done by hand.

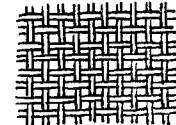
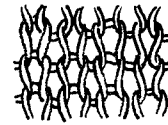
Then the spinning wheel was made. Pioneers used this type of spinning wheel.



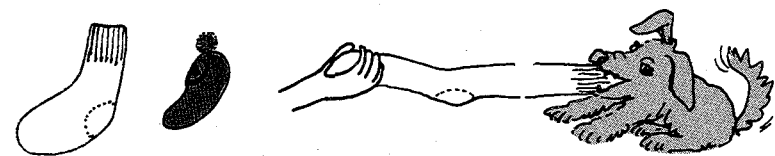
Today, huge machines do most of the work.



Once the yarn is spun, it needs to be knitted or woven into cloth. What is the knitted and what is woven?



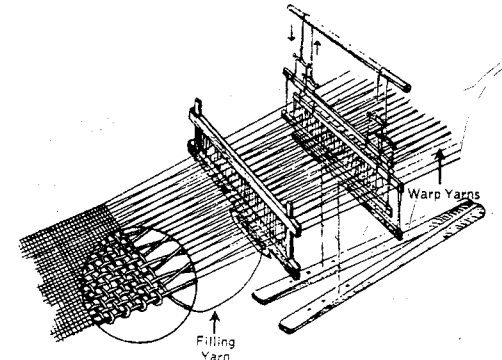
Look at your socks. Socks are knitted. Stretchy clothes are knitted.



Do you know anyone who knits? Does anyone in the class have on a t-shirt or a jersey-like turtleneck? These are knitted.

Now look at someone's denim jeans. These are made of a cloth that is woven.

Woven cloth is made on a loom. Knitted cloth is made by a knitter or a knitting machine.



What are your clothes made of? Are you wearing any real wool? Is anyone in the class wearing real wool? How can you tell? Read your clothing labels. The wool logo should be on the label if it's real wool.



Unscramble These Animal Products:

Sheep - olow

Beef - emta

Swine - krop

Goats - imlk

Rabbits - urf

Fish - loi

Chicken - gsge

Dairy - ceehes



And now it's time
to see you know,
how all these goods
from the source
do flow.

It's really not
so hard to see
the source is out
in the country.

The Source
is the Farm!

