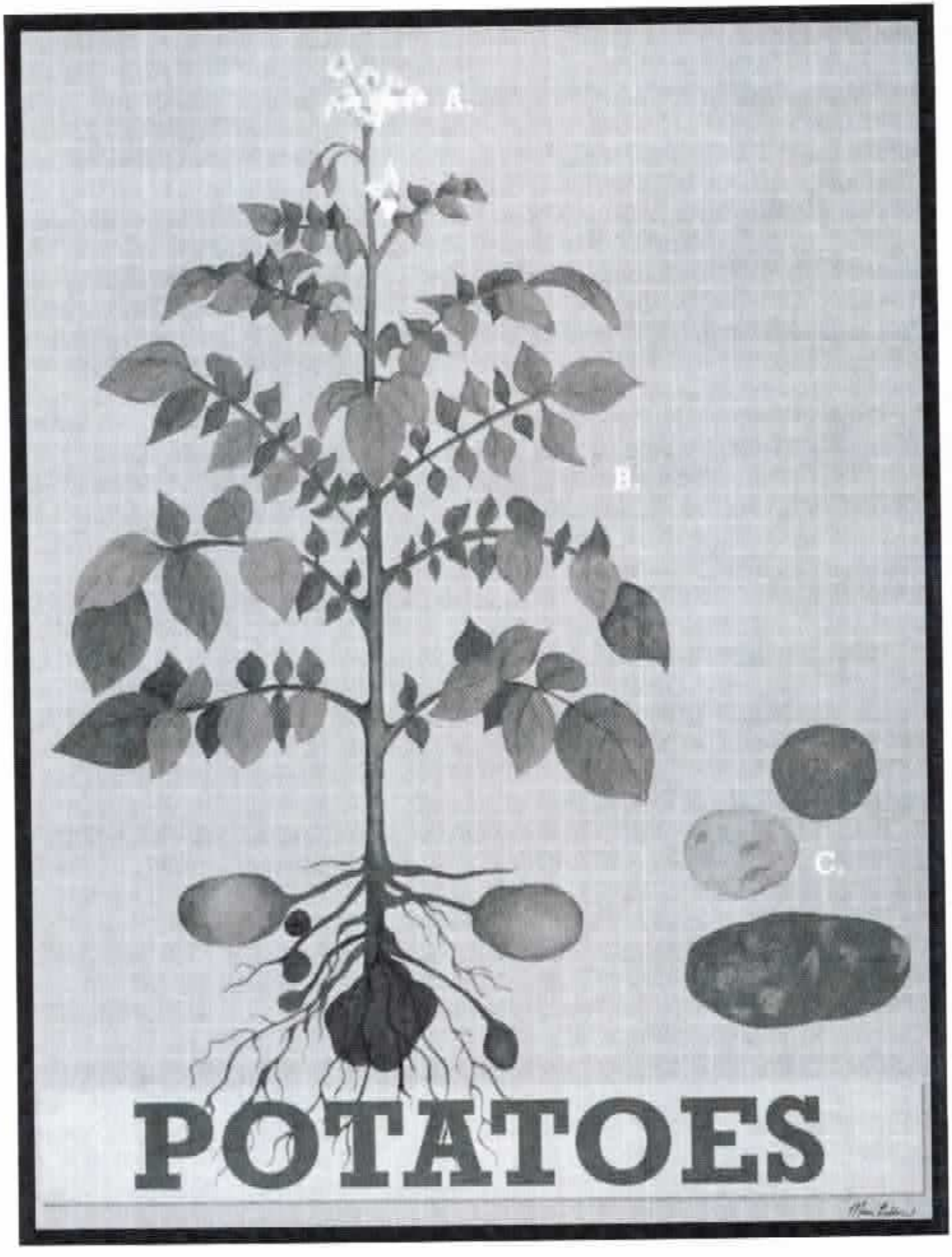
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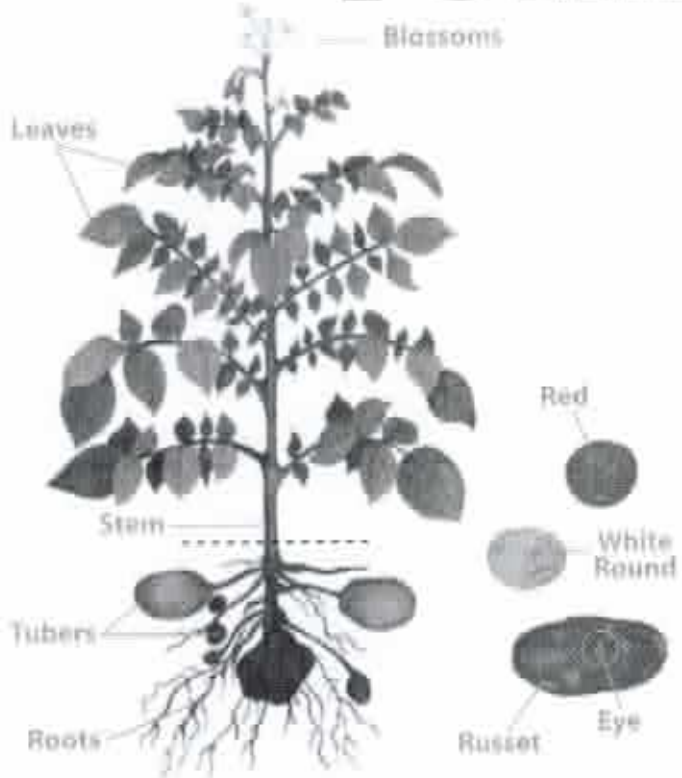
POTATOES

POTATOES



Top 5 Minnesota Counties Reporting Potato Production in 2007:
Sherburne, Morrison, Polk, Todd and Freeborn

Potatoes

The potato plant is one of the most widely cultivated vegetables in the world. It can be grown under a wide range of environmental conditions. There are primarily three types of potatoes grown in the Minnesota. Russet potatoes have rough, brown skin whose appearance is netted when mature. Most russet potatoes are baked or processed to make french fries. White potatoes are slightly oblong in shape and have smooth, cream-colored skins. Their major use is in the production of potato chips. Red potatoes are mostly round in shape with very thin, smooth, red skin and are used in potato salad. In 2007, Minnesota ranked sixth nationally in production.

Planting

Planting potatoes is possible from true seed produced in the fruit of the plant. However, better results occur by growing from pieces of a tuber. Planting a successful potato crop begins with selecting the proper seed potatoes. It is important to plant only certified seed potatoes. This ensures that the potatoes will be true to their variety (clone) and will not carry viral diseases. A "seed piece" is a piece of tuber with an eye. Seed potatoes should be cut so that two eyes are included on the surface of each piece. The pieces are planted with the eyes facing upward, 3 to 6 inches deep, and 7 to 15 inches apart. The fields must receive an even, moderate moisture supply and must be constantly monitored for diseases and insects. Sandy soils with irrigation produce the most uniform potatoes with the least amount of bruising. The average potato is 75 to 80% water.

Harvest

Potatoes can be harvested either during the season and used as new potatoes or late in the season after plants have matured and vines have died. The potato harvest usually takes place about 90 to 120 days after planting. Specialized mechanical harvesters are used to dig the potatoes from underground. A lot of care must be taken in this process as the tubers will damage easily. Damage to tubers can reduce the amount of potatoes that can be sold and may make stored potatoes more susceptible to decay.

Storage

Potatoes that are not sold immediately after they are harvested should be stored properly if they are to be marketed at their full potential value. Potatoes should be stored in a cool, humid place to prevent sprouting. Direct sunlight will cause tubers to turn green and develop a bitter taste. The storage space should have relatively high humidity so the potatoes do not dry out, but it must also have good ventilation so the potatoes do not begin to decay.

On The Front

A. Blossoms

Potato plant blossoms are clustered 1 inch wide, five-petaled flowers. These flowers range in color including white, lavender, blue, yellow and purple. The green berries (fruit) form and develop after fertilization and turn yellow as they mature. Each berry may contain 200 or more seeds. These seeds are used by plant breeders, not for commercial production.

B. Potato Plant

The potato plant is bushy, sprawling and dark green. It consists of stems which grow to a length of 1 to 2 feet. The potato leaf is slightly hairy, and has one long (terminal) leaflet in the center with two to four pairs of leaflets, 1 to 3 inches in length.

C. Tubers

The tubers are the portion of the plant used for food and "seed." They are enlarged, fleshy stems which develop below the soil surface. Each tuber contains several "eyes" or buds. These are the small dimples on the surface of the tubers from which new plants can develop.

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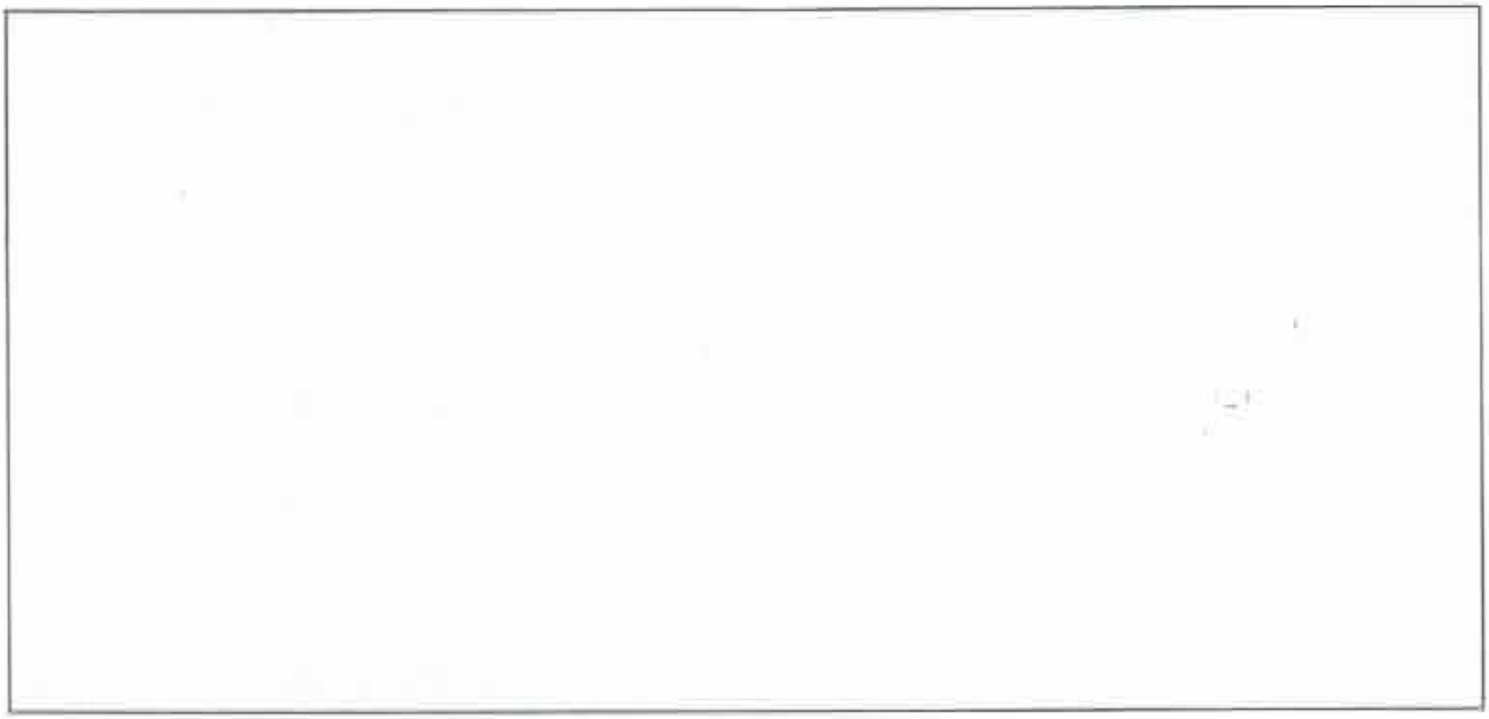
POTATOES

1. Using the box provided, draw a picture of a potato plant and its potatoes.



2. Identify the three types of potatoes grown in Minnesota and what they are used for?

3. How should potatoes be stored, why?

4. Using your map of Minnesota counties, create a symbol for potatoes and mark the top 10 counties where they were produced in 2007.