Ag Science 1 · Unit 2 · Level 2 (modified)

Washington Crops: Potatoes, Wheat & Apples



TODAY'S PLAN

- 🥔 Bedlington seed potatoes
- 🌱 Parts of a potato plant
- 🌾 Washington wheat
- 🍎 Washington apples
- 🌌 Cosmic Crisp

Words to Know

Words to Know



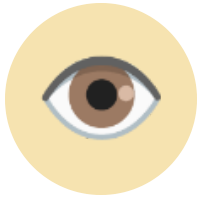
Potato

A tuber: the swollen underground stem of the potato plant.



Seed potato

A potato (or piece) planted to grow a new potato plant. Bedlington Farms grows certified seed potatoes.



Eye

The bud on a potato where a new sprout grows.



Harvest

Gathering a crop when it is ready. Potato vines dying back is a sign it is time.

Words to Know

More Words to Know



🌾 **Wheat**: A grain crop for flour. Most Washington wheat is soft white wheat, and most is exported.

🍺 **Barley**: A grain used for animal feed and malt.

🍎 **Variety**: One kind of a crop, like Gala, Fuji, or Cosmic Crisp apples.

🌳 **Orchard**: A field of fruit trees, like apples or cherries.

Learn

Dick Bedlington Farms

👩‍🌾 Started in **1942** with 4 acres; now about **1,200** acres of potatoes.

📍 Farms in Deming, Everson, Lynden, and Ferndale.

🔄 Rotation crops: wheat, grass, corn, green beans.



Learn

Why Whatcom Is Good for Seed



🛡️ An **isolated** area between the ocean and mountains = fewer insects and diseases.

🟫 Rich soils with good **drainage**.

🥔 About 25 varieties: russet, red, yellow, purple, fingerling.

Steps

Making Seed Potatoes



1. Lab: **tissue culture** makes clean plants
2. Greenhouse: harvest **minitubers**
3. Field: 2 more years to build up seed
4. Ship to commercial growers (trucks, overseas)

🃏 Check 1 of 3



Bedlington sells seed potatoes to…

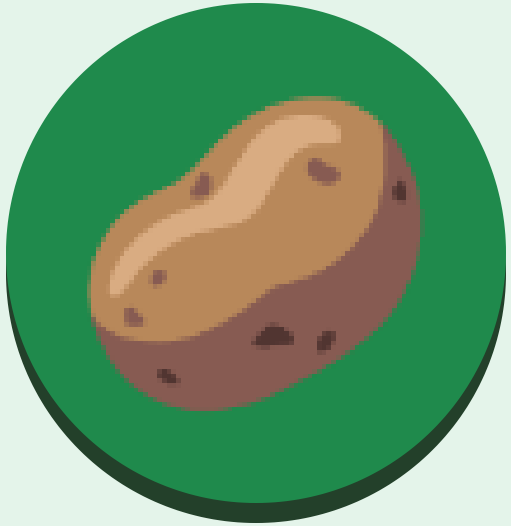
Hold up 1, 2, or 3:

1️⃣ Grocery store shoppers

2️⃣ Commercial potato growers

3️⃣ Restaurants

✅ Answer · Card 1 of 3



Commercial potato growers

Growers plant the seed; stores sell their potatoes.

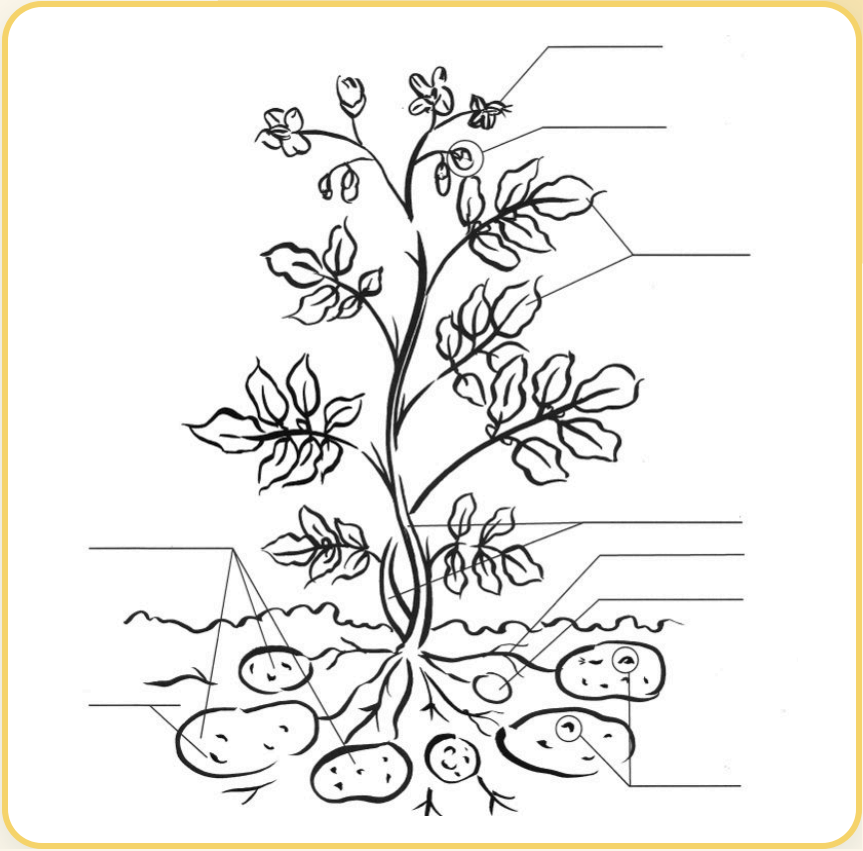
Learn

Parts of a Potato Plant

🌸 Flower · 🍒 fruit · 🍃 leaves · 🌿 stem

🥔 Seed potato and new **tubers** underground

👁️ **Eyes** sprout new stems



Learn

Washington Wheat

🌾 Washington mostly grows **soft white wheat** (noodles, crackers, cakes).

🚢 Most of it is **exported**, much to Asia.

🌄 Grown in eastern WA's dryland hills.



Learn

Potatoes in the Columbia Basin

☀️ Long, sunny days and rich soil = high yields.

💧 Very little rain, so farms **irrigate** from the Columbia River.

🧺 Harvest when the vines die back.



🃏 Check 2 of 3



Columbia Basin potatoes need irrigation because…

Hold up 1, 2, or 3:

1️⃣ It rains every day

2️⃣ Potatoes grow in water

3️⃣ It gets very little rain

✅ Answer · Card 2 of 3



It gets very little rain

The basin is dry; the river supplies water.

Learn

Washington Apples

🍎 Washington grows more than **half** of U.S. apples.

🌸 Bees **pollinate** the blossoms; growers **thin** extra apples.

🌿 **Grafting** keeps each variety the same.



Learn

Cosmic Crisp

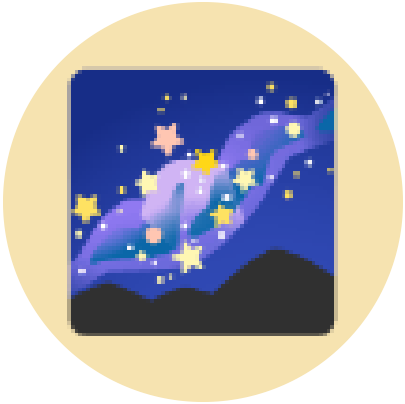
🧬 Bred at **WSU**: Enterprise × **Honeycrisp**.

👨‍🔬 Developed by Dr. Bruce **Barritt**; growers' fees funded the research.

🧊 Stays crisp in storage for about a year.



🃏 Check 3 of 3



Cosmic Crisp is a cross of Enterprise and...

Hold up 1, 2, or 3:

1️⃣ Honeycrisp

2️⃣ Granny Smith

3️⃣ Red Delicious

✅ Answer · Card 3 of 3



Honeycrisp

Enterprise × Honeycrisp.

Learn

Apple Taste Lab



Gala

sweet, mild



Granny Smith

tart, firm



Fuji

sweet, crisp



Cosmic Crisp

sweet-tart, very crisp

Wrap-Up

Recap



Seed potatoes

lab → greenhouse → field



Wheat

soft white, exported



Apples

WA #1; graft, pollinate



Cosmic Crisp

WSU, Enterprise × Honeycrisp

Wrap-Up

Exit Ticket



1️⃣ Why is Whatcom County a good place for seed potatoes?

2️⃣ What kind of wheat does Washington mostly grow, and where does it go?

3️⃣ Name the 2 parent apples of Cosmic Crisp.