



Oregon State  
University

# Oregon Grown

Klamath County Extension



Mrs. Case



Henny Penny



Hello Students! Welcome to the Oregon Grown classroom. In our classroom we'll explore all about food—where it grows, how it grows, who grows it and best of all, how we can eat it! My name is Mrs. Case and I've brought along my friend Henny Penny. Come on in Henny. Can you guess what we'll be talking about today (Hint—what's in my hand?). You guessed it—GRAINS. So many things we eat come from grains. My favorite is popcorn. Henny Penny likes barley. Can you name a grain?

**\*\*\*TEACHER NOTE:**

Key Message: Students will be able to identify the difference between whole grains and refined grains; identify the parts of the grain; identify how grains are processed or milled; identify where grains are grown in Oregon.

This lesson meets Oregon state Standards: NGSS 3-LS1-1.B; SS 3.10; HE 1.3.3; RI 3.2; Essential Skills 4, 9

Length: approximately 10 minutes without pauses for the activity and discussion. Total of approximately 15-20 minutes with activity and discussion pauses.



# Activity Time



Find the parts of the grain



Now its time to do an activity together. Lets find out about the different parts of a whole grain.

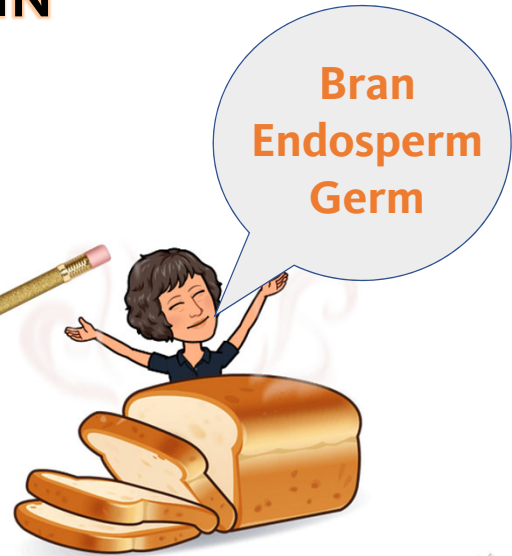
**\*\*\*TEACHER NOTE:** You can request to check out a lesson activity kit from Klamath County OSU extension office. Activity options for this lesson include a physical (out of desk) Ag Tag relay game or a class set of individual (at desk) Ag Tag cards. Ag tag Cards are available on website to print or in a kit to check out & return.

If you have not received a kit. Pause here and please see the printable alternate activity kit materials and video on this lesson's webpage. You can watch the video and complete the activity using a blank piece of paper or print out the alternate activity page and use it to follow along with the video. Check out the Alternate activity section of Supporting Lesson Materials on this lessons webpage.

# PARTS OF A GRAIN



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We'll start by naming or labeling the parts of the grain. Do you remember the 3 parts? Bran, endosperm and germ. Good. As you write each part, describe or tell what job it has. Like this. After that we'll use a real head of wheat to find the kernel hiding inside.

**\*\*\*TEACHER NOTE: \*\*\*TEACHER NOTE:** You can request to check out a lesson activity kit (wheat heads) from Klamath County OSU extension office. Availability limited. Activity options for this lesson include a wheat head for dissection and a printable wheat diagram worksheet. The wheat diagram is available on website to print.

If you have not received a kit. Pause here and please see the printable alternate activity kit materials and video on this lesson's webpage. You can watch the video and complete the activity using a blank piece of paper or print out the alternate activity page and use it to follow along with the video. Check out the Alternate activity section of Supporting Lesson Materials on this lesson's webpage.

## WHAT YOU WILL NEED:

- Picture of Grain
- Brown, orange and red Crayons/colored pencils
- Head of wheat (1)



Name \_\_\_\_\_

Parts of a Grain

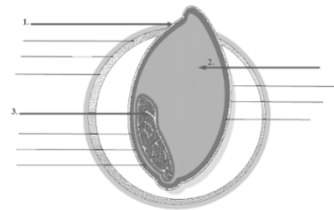


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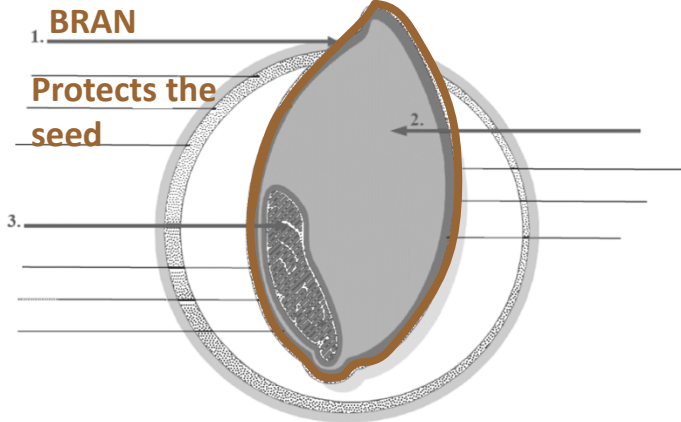
Let's get ready to do the activity. Get out all your supplies. You will need: the Parts of a Grain picture or diagram, colored pencils- brown, orange and red or crayons. A regular pencil. And one head of wheat.

# Step 1

Name **Mrs. Case**



## Parts of a Grain



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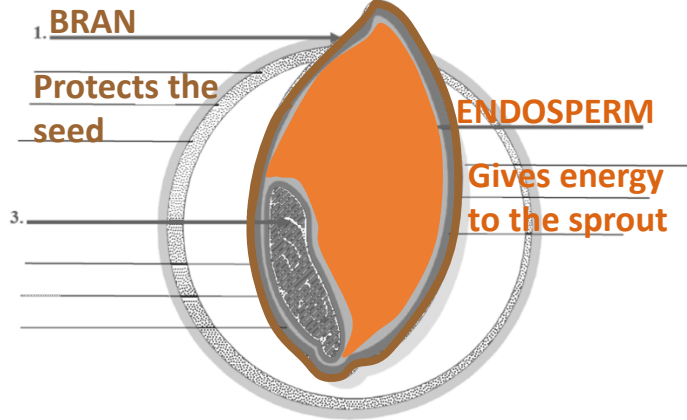
Our first step: write your name with a regular pencil in space, like this. Set your pencil down and grab the brown colored pencil or crayon. With your brown color pencil or crayon color in the outside edge of the grain. This is the BRAN. What's the Bran's job? It the outer shell that protects the seed. With your brown color pencil or crayon write the word BRAN on number one. Then below write what it's job is: "Protects the seed."

## Step 2

Name \_\_\_\_\_



### Parts of a Grain



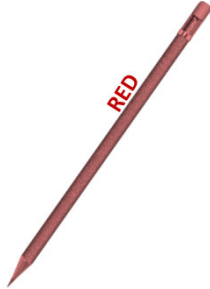
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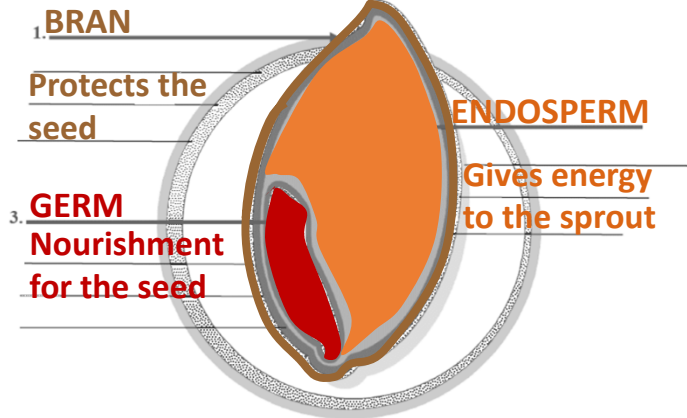
We have labeled one part of the grain kernel! Now it is time to do a second part. Use your orange color pencil or crayon and color in the largest part of the grain kernel illustration. This is the ENDOSPERM. With your orange crayon or color pencil write under number 2 ENDOSPERM. Then write what it's job is on the lines below. This largest part of the kernel "Gives energy to the sprout."

### Step 3

Name \_\_\_\_\_



## Parts of a Grain



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One more part of the kernel to identify and our diagram will be complete. With your red color pencil or crayon color in the small part of the kernel the bottom. Can you find it? This is the Germ-The part of the kernel that sprouts and grows into a new plant. Write the word GERM with your red color pencil or crayon on line 3. And write what the Germs job is in the space below: provide “nourishment for the seed “  
Look at that! We have all 3 parts that make a **WHOLE GRAIN** ! Time now to touch some real grain, not just a diagram.



Next, we'll dissect the head of wheat where the kernels are hiding. To get to the kernel inside, we separate it from the chaff by pulling it apart. The chaff is the part we DON'T eat. Surprise! There are the kernels. That's Henny's favorite part. Good job! Count up how many you have. You can tape those to your wheat kernel diagram if you would like. Or with the help of an adult, try crushing them into flour. Do you think that will be easy or hard? Imagine how many wheat kernels it takes to make enough flour for a loaf of bread.

**\*\*\*TEACHER NOTE:** If you would like, Pause here to ensure everyone is ready for the next step.

Video: separating chaff. <https://utah.agclassroom.org/matrix/lesson/628/>

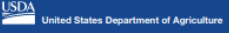





That concludes your Oregon Grown lesson. Remember to look for whole grains to eat more often, and see if you can see grains growing in the fields of Oregon. See you next time!

**\*\*\*TEACHER NOTE:** Please ensure students complete exit quiz after lesson on our website after lesson. This is how we are collecting data on how many students we are reaching and their understanding. It is a simple couple questions, like exit ticket for your lessons.

Grain field picture from Klamath County Research center grain fields. Photo by Tom Silberstein.

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Form AD-475-S SNAP and FDIR Poster Revised September 2019

Afiche del Formulario AD-475-S SNAP y FDIR / Revisado Septiembre 2019

\*\*\*\*TEACHER NOTE: If program delivered in a non-school setting, you must read the script below

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## Credits (1 of 1)



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Oregon Agriculture in the  
Classroom Foundation

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#### Sources:

Oregon Ag in the Classroom  
National Ag in the Classroom  
Oregon Harvest for Schools  
Whole Grains Council

Grain field pictures from Klamath County Research center grain fields. Photo by Tom Silberstein.