
Which Little Piggy? Ear Notching

Grades 7-8

Pre Algebra



Objectives

Students identify procedures used to ear notch pigs and then read the ear notches to determine the pigs litter number and individual number.

Vocabulary

Ear Notcher—a tool that makes a “V” shaped notch by cutting an ear, used for identifying animals

Hog— generic term, usually applied to growing swine

Identification— a way to determine one thing from another

Notch— a small “V” shaped cut

Pork producer— integrated swine producer and meat packer

Background

According to the National Pork Producers Council, there are more than 60,000 **pork producers** in the United States that raise more than 115 million **hogs** for our nation's food supply. This contributes to a gross income of more than \$20 billion to the nation's economy each year. But before *This Little Piggy* can go to market, it is raised by one of the 60,000 pork producers. These farmers work day in and day out to ensure the animals are healthy and growing at their optimum rate. Part of their job is to monitor each animal individually, and with so many pigs that look alike, this can be difficult to do without a method of identification.

Many livestock species use tagging as a method of identification, but when the piglets are first born, their ears are VERY SMALL. Piglets are also very inquisitive and playful which makes ear tags dangerous as they get pulled out and can permanently damage the ear. Using an ear notcher, producers are able to make small notches in the pigs ear that represent a universal code that is used by most all pig producers. The great thing is, the identification is permanent, easily visible, and unlike a tag, cannot get lost.

Additional Resources

<http://surechamp.com/blog/2016/06/29/how-to-read-pig-ear-notches/>

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Teacher Resources



Activity 1: Reading Ear Notches, (ELA) 1-2 50 minute class periods

Procedures

1. Pass out the “How to Read Ear Notches” information sheet included with this lesson.
2. Read over the information as a class, discussing what is read to ensure the students understand how to read the ear notches.
3. Pass out the “Identifying Ear Notches” worksheet and allow students time to complete it.
4. Give students the “Make Your Own Ears” worksheet to make their own set of pig ears. Allow them to notch the ears making the pig ears so the Litter number is the day of their birthday and in the individual number is the month they were born.

Lesson Title

Grades 7-8

Standards



Oklahoma Academic Standards



Activity 1: Identifying Ear Notches (Math)

- 7.N.2.5** Solve real-world and mathematical problems involving calculations with rational numbers and positive integer exponents.
- PA.N.1** Read, write, compare, classify, and represent real numbers and use them to solve problems in various contexts.

Which Little Piggy? How to Read an Ear Notch

How to Read an Ear Notch

Ear notches may look complicated but if you can add, reading ear notches is simple. Once you know what each ear represents, and understand the five different areas of the ear that can be notched you'll be able to identify the litter and individual notches of a pig. Keep these five things in mind when reading ear notches:

1. Know which ear is which.

The pigs **RIGHT** ear represents the **LITTER** number on the **RANCH**, think of it as the pigs last name. The **LEFT** ear represents the **INDIVIDUAL** number, or it's # in that **LITTER**, like the pigs first name.

All pigs in the same litter must have the same ear notches in the right ear. The left ear will have different notches to show the individual pig's number in the litter, so each pig will have a different combination of notches in the left ear.

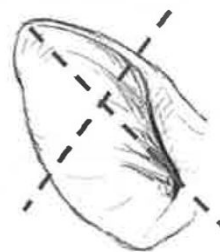
The pigs **RIGHT**
ear in the Litter #
on the **RANCH**



The pigs **LEFT**
ear in the
individual # in
the **LITTER**

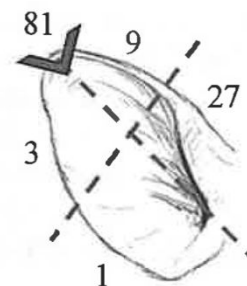
2. Divide the ear into quadrants.

A pig can be notched in four different quadrants. Imagine a line down the center of the ear, from the top straight down to the bottom. Now imagine a second line from midway through the ear straight across. There may also be a notch at the very tip of the ear.



3. Know what the quadrants are worth.

Starting at the bottom quadrant nearest the pig's head first, multiply each quadrant by three as you work your way around to the top. The first quadrant is worth 1, second quadrant is worth 3, third quadrant is worth 9, and the last quadrant at the top of the ear is worth 27. But remember if the tip of the ear is notched, it is worth 81.



4. Add the notches together.

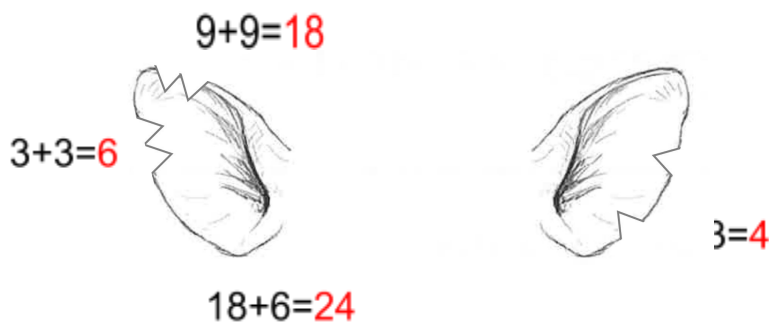
Once you know what each notch is worth, add them together.

There will never be more than 2 notches in any one quadrant, as 3 notches in the 1 quadrant would be equal to 1 notch in the 2nd quadrant.

Which Little Piggy? How to Read an Ear Notch (Continued)

5. State the litter number followed by the individual number.

Now that you know the value of the notches you have, you can read them! Looking at the pig from the front, you can read from your left to your right, and it's will be the pigs Litter# on the Ranch (Your Left=Pigs Right Ear), followed by their Individual Number# in their Litter (Your Right=Pig's Left Ear). State the litter number followed by dash the individual number. *For example, this pig would be identified as 24-4.*



Notice the distance between notches? Sometimes having a bunch of notches can get confusing... is the left ear a 2, 4 or 6? Well, look at the right ear... see how close those notches are to one another? It's customary to place two notches that are the same closer together... Thus, the following would be the same number of total notches on the individual ear, but all mean something different.

	<p>24-2 This is Pig #2 in Litter #24</p>
	<p>24-6 This is Pig #6 in Litter #24</p>
	<p>24-?? Is this Pig #2? 4? or 6? in Litter #24. Because these notches are not in a distinct quadrant, it is hard to tell what number they are. It is important for producers to remember to make notches as clear as possible.</p>

Which Little Piggy? Ear Notching







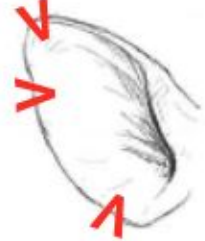
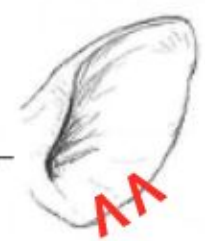



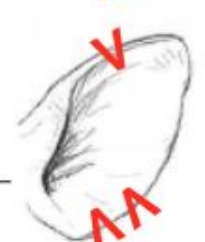



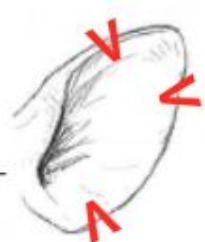


Activity 1 Worksheet 1: Identifying Ear Notches

Name: _____ Date: _____

Class/Hour/Teacher: _____

Use the information from the “How to Read an Ear Notch” pages to determine the Litter number and Individual number for each pig. Circle the 2 pigs from same litter.

	1. _____			2. _____	
	3. _____			4. _____	
	5. _____			6. _____	
	7. _____			8. _____	

Which Little Piggy? Ear Notching















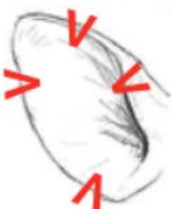



Activity 1 Worksheet 1: Identifying Ear Notches **ANSWERS**

Name: _____ Date: _____

Class/Hour/Teacher: _____

Use the information from the “How to Read an Ear Notch” pages to determine the Litter number and Individual number for each pig. Circle the 2 pigs from same litter.

 1. $9+3+1=13$ $9+1=10$ PIG 13-10 	 2. $9+9+3=21$ $3+3=6$ PIG 21-6 
 3. $27+3+1+1=32$ $9+3+1=13$ PIG 32-13 	 4. $81+3+1=85$ $1+1=2$ PIG 85-2 
 5. $27+9+3+1=40$ $3+3+1+1=8$ PIG 40-8 	 6. $27+3+1+1=32$ $9+1+1=11$ PIG 32-11 
 7. $81+9+3+3=96$ $9+3+3+1+1=17$ PIG 96-17 	 8. $27+9+3+1=37$ $9+3+1=13$ PIG 37-13 

Which Little Piggy? Ear Notching



Activity 1 Worksheet 2: Make Your Own Ears

Name: _____ Date: _____

Class/Hour/Teacher: _____

Make your own ears.

Now is your chance to make a set of pig ears and notch them with your information! But first, let's review...

The notches in the pig's RIGHT ear represents the _____ number on the _____. We might also call this the pigs FIRST LAST (circle one) name.

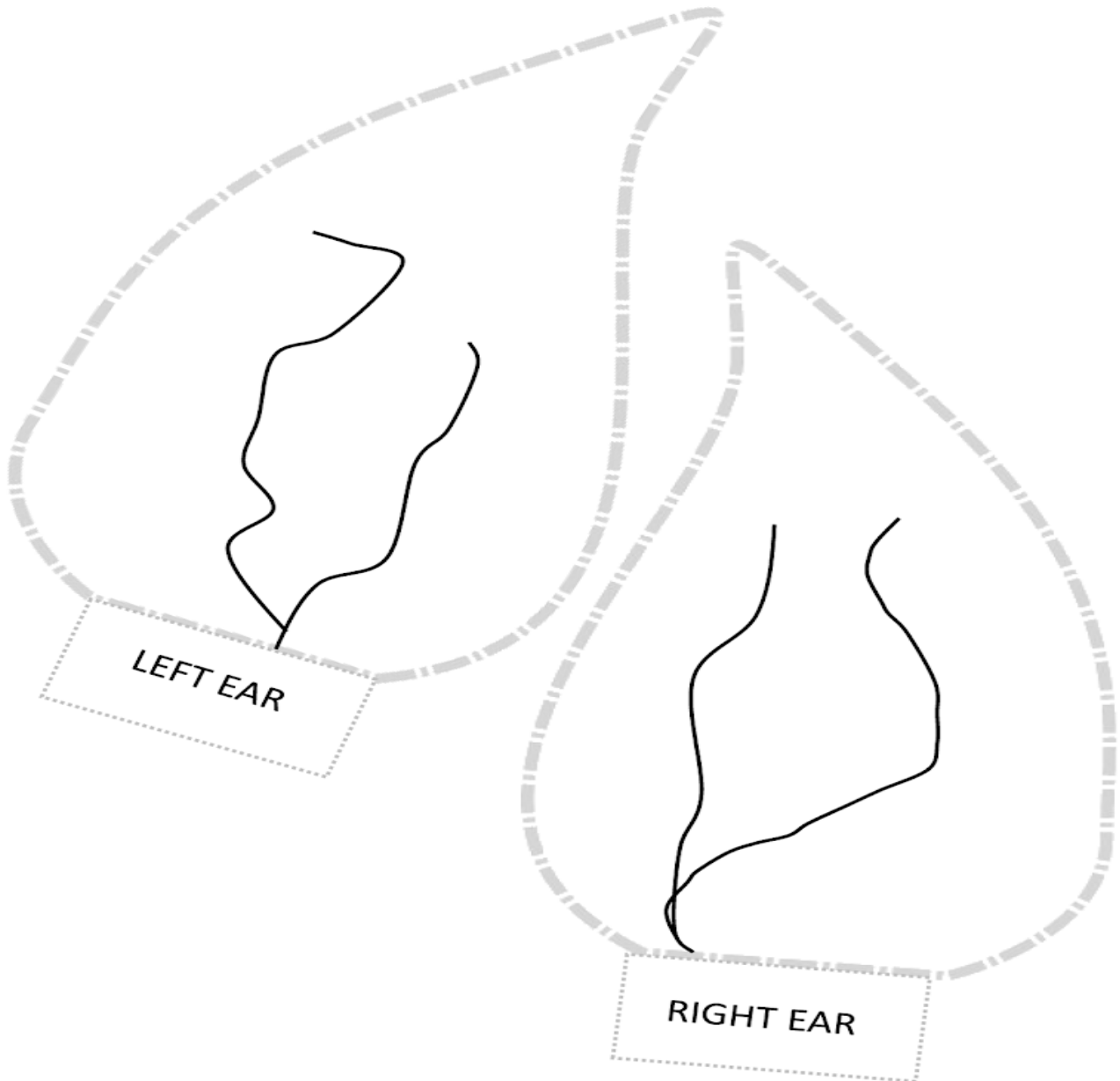
The notches in the pig's LEFT ear represents the _____ number in their _____. We might also call this the pigs FIRST LAST (circle one) name.

In the box below, draw a pig head (as if they are facing you) and on its ears, draw in the quadrants and what a notch in each quadrant represents.

Which Little Piggy? Ear Notching: Activity 1 Make Your Own Ears (Continued)

Alright, now is your chance to make some ears...

Using the ears provided by your teacher, make the pig ears so that your Litter number is the Day of your birthday and the Individual number is the Month you were born. For example, if you were born on April 27th, your pig number would be 27-4 meaning you were born on the 27th day of the 4th month. Then attach ears to the headband.



Which Little Piggy? Ear Notching: Activity 1 Make Your Own Ears (Continued)

<div>1</div> <div>INSIDE FRONT</div> <div>2</div>	<div></div> <div>RIGHT SIDE</div> <div>1</div>	<div>2</div> <div>LEFT SIDE</div> <div></div>	<p>Instructions:</p> <p>Put together your band first. With the words on the inside, staple so the smooth side of the staple is on the inside. Staple the ONES together and the TWOS together. Then make the head-band fit your head. Finally, staple the ears in the correct spots, pointed side UP.</p> <p>First, lightly draw your notches using pencil to ensure you have the correct notch numbers</p> <p>For your Litter # on the Ranch use the date of your birthday.</p> <p>For your Individual Litter # use the MONTH of your birthday.</p> <p>Once your ears have been double checked, you can notch them.</p>
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Which Little Piggy? Ear Notching



Activity 1 Worksheet 2: Make Your Own Ears **ANSWERS**

Name: _____ Date: _____

Class/Hour/Teacher: _____

Make your own ears.

Now is your chance to make a set of pig ears and notch them with your information! But first, let's review...

The notches in the pig's RIGHT ear represents the **LITTER** number on the **RANCH**. We might also call this the pigs **FIRST LAST** (circle one) name.

The notches in the pig's LEFT ear represents the **INDIVIDUAL** number in their **LITTER**. We might also call this the pigs **FIRST LAST** (circle one) name.

In the box below, draw a pig head (as if they are facing you) and on its ears, draw in the quadrants and what a notch in each quadrant represents.