

Counting Sheep or People? Census 2020

Grades PreK-2

Math, World Language



Objectives

Students will use one-to-one correspondence and count popcorn to represent sheep by 1s, 2s, 5s, and 10s. Students will use tally marks to record the number of “sheep” they have. Students will use counting words from other languages to count popcorn, which represents sheep. Students learn about the Census of 2020 by taking a census of their class and creating a class graph.

Vocabulary

census— official process of counting the number of people in a country, city, or town and collecting information about them

forage— grasses and other plants that are eaten by animals

grazing— to eat grass or other plants that are growing in a field, pasture, etc.

population— the number of people who live in a place

predator— an animal that lives by killing and eating other animals

shepherd— a person whose job is to take care of sheep

Background

Sheep are very gentle animals and are easily frightened. They flock together for protection because they cannot really protect themselves. Sheep have many natural **predators**, animals that hunt and kill other animals for food. They include coyotes, wolves and domestic dogs. Sometimes larger animals, like mules or llamas, are kept in the pastures with the sheep to scare off possible predators.

The people who raise and care for sheep are called **shepherds**. Sometimes, shepherds have dogs to help take care of the sheep. The dog learns to round up the sheep, and when one wanders from the flock, the dog brings it back. There are many different breeds of sheep. Some are raised for meat, and others primarily for their wool. Sheep are valuable because they often graze land that other livestock cannot. Sheep eat grass and hay. Oklahoma is a good place for raising sheep because it is one of only a few states that has year-round **forage** production.

In order to keep accurate records and to prevent sheep from straying, ancient shepherds had to perform frequent head-counts of their flocks. In some parts of the world, farms were granted access to common **grazing** land—land that everyone could use. To prevent overgrazing, it was necessary for each farm to keep accurate, updated head counts. A count was the first action performed in the morning and the last action performed at night. A count was made after moving the sheep from one pasture to another and after any operation involving the sheep, such as shearing, foot-trimming, etc. Before the Industrial Revolution, shepherds in England, Scotland and Wales used their own numbering system for counting their sheep, with counting words to 20, but no higher. For every 20 sheep the shepherd would place a mark on the ground, move his hands to another mark on the crook or drop a pebble in his pocket. Twenty sheep was a score (5 score sheep = 100).

Just as a shepherd counts sheep, it is also necessary to count people. The decennial **census** is a count of every person living in the United States that occurs every 10 years, to get an overall look at communities across the United States, in order to better serve them. The census is used to help determine funding for schools and roads, congressional representation, and more.

Counting Sheep or People: Census 2020

Filling out the census is the law, not just our civic duty. The Constitution mandates that the country counts its **population** once every 10 years. The 2020 Census will mark the 24th time that the United States has counted its population since 1790. Everyone residing in the U.S. gets counted in the census — children, seniors, minorities, immigrants (legal and illegal), tribal communities, homeless, homeowners, renters, students, workers — everyone. It is important that every person be counted to make sure the government can provide money to each community for things like roads and parks. Census day is April 1, 2020.

In addition to the census, the National Agricultural Statistics Service (NASS) is responsible for conducting the Census of Agriculture. The Census of Agriculture counts the agricultural production in the United States. From 1840 to 1920 the Census of Agriculture was taken every 10 years, just like the Census. Since 1925 the Census of Agriculture has been taken every five years, in the years ending in 2 and 7. In addition, NASS field offices in every state produce a wide variety of reports throughout the year, along with an annual report. These reports are used by producers, researchers, the news media, people involved in financial markets and many others. These reports are compiled only for the top agricultural commodities from a sampling of state producers contacted at random. In contrast, the Census of Agriculture reports on every agricultural commodity produced in the state, based on surveys collected from every producer.

Additional Reading

Everyone Counts, Free Printable Activity Book:

https://www.census.gov/content/dam/Census/programs-surveys/sis/resources/2020/prek_storybook_english_printable.pdf

Cox, Judy, *Sheep Won't Sleep: Counting by 2s, 5s, and 10s*, Holiday House, 2017

Nelson, Robin, *Sheep*, Lerner Classroom, 2009

Websites

<https://okletscount.org/>

<https://www.census.gov/schools/facts/oklahoma>

<https://www.census.gov/programs-surveys/sis/activities/overview.html>

<https://www.youtube.com/watch?v=37RpmLElkQ>

<https://www.census.gov/programs-surveys/sis/2020census/2020-resources/pre-k/everyone-counts-song.html>

Counting Sheep or People? Census 2020

Activity 1: Counting Popcorn Sheep, (Math) 1 50 minute class period

Students will use one-to-one correspondence and count popcorn to represent sheep by 1s, 2s, 5s, and 10s. Students will use tally marks to record the number of “sheep” they have.

Oklahoma Academic Standards

Activity 1: Counting Popcorn Sheep (Math)

- | | |
|----------|--|
| PK.N.2.2 | Use one-to-one correspondence in counting objects and matching groups of objects. |
| K.N.1.5 | Count forward, with and without objects, from any given number up to 10. |
| 1.N.1.4 | Count forward, with and without objects, from any given number up to 100 by 1s, 2s, 5s and 10s. |
| 2.N.1.1 | Read, write, discuss, and represent whole numbers up to 1,000. Representations may include numerals, words, pictures, tally marks, number lines and manipulatives. |

Materials:

- Popcorn
- Paper
- Pencils, markers, or crayons
- Activity 1 & 2 Worksheet 1 “**Sheep Counting Mat**”

Procedures

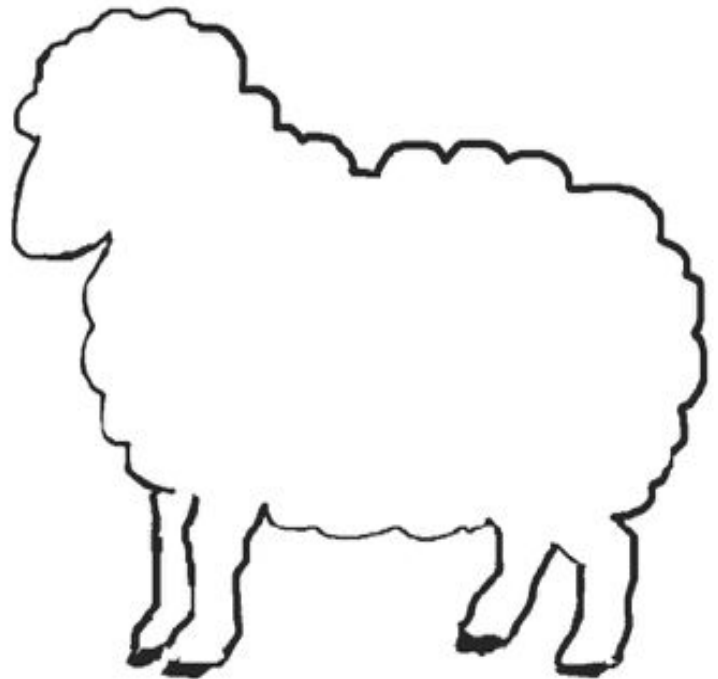
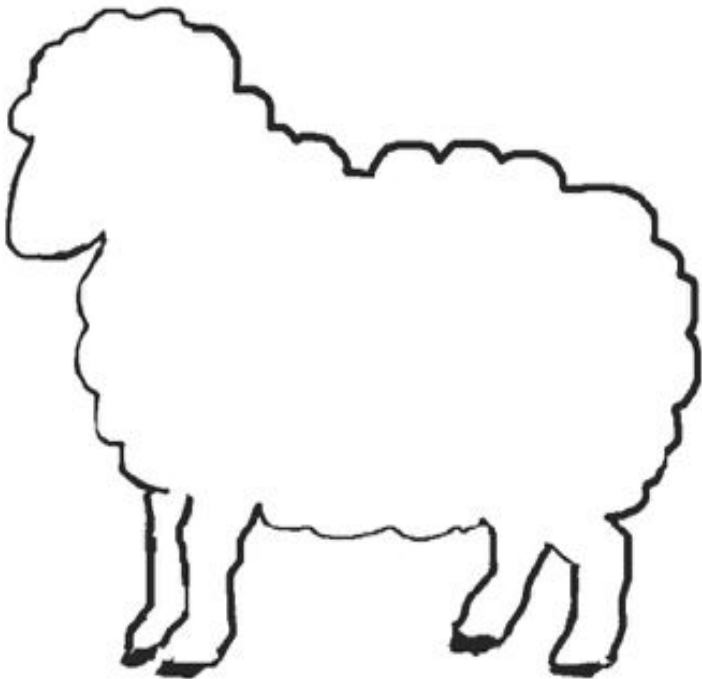
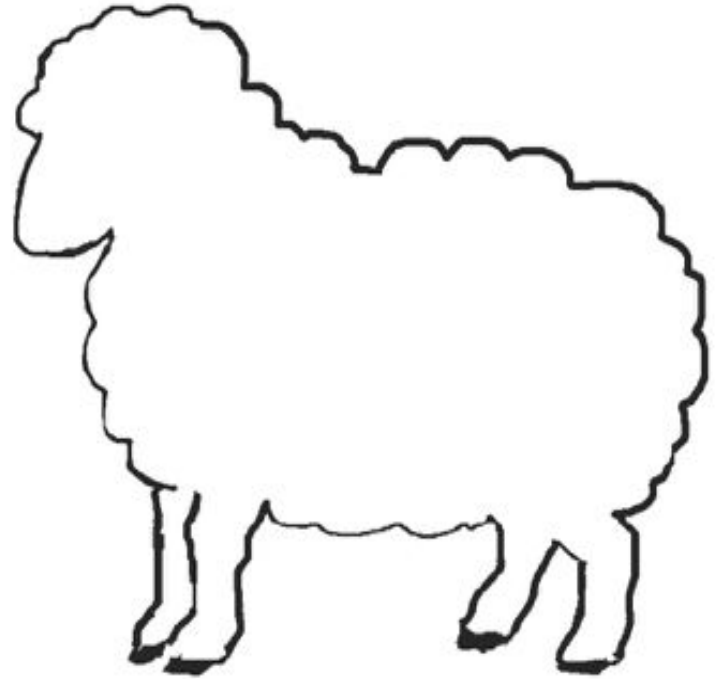
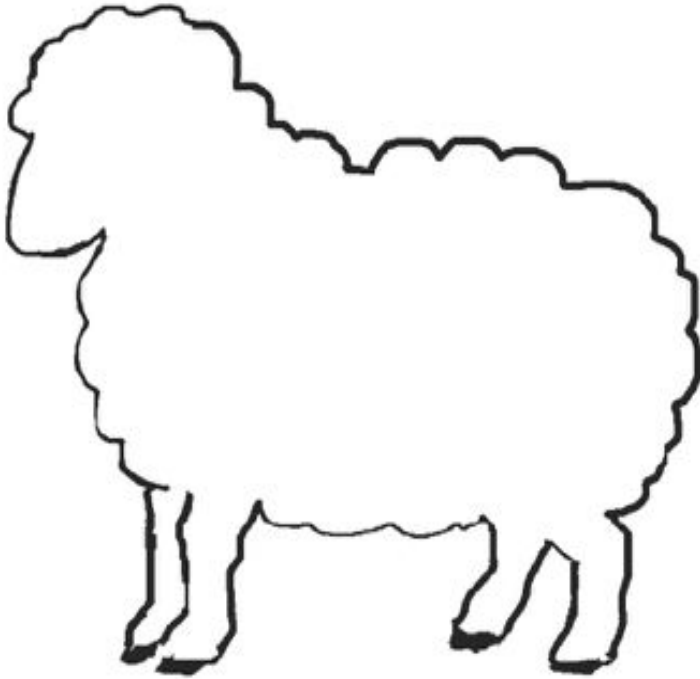
1. Read the background information to the students and discuss why shepherds needed to count their sheep and how they kept track of their counting.
2. Divide students into groups, and provide each group with a bowl of plain popcorn. Tell students that the popcorn represents sheep.
3. Students will count their “sheep,” first by ones, then by twos, fives, tens, and then by twenties, using the systems they have designed.
4. Remind students of the systems used by ancient shepherds described in the background (tally marks, knots on a string, pebbles, etc.) to count their sheep.
5. Students will use tally marks (or the system they choose) to record the number of sheep onto their papers.
6. As a class, find the total number of sheep for each group and for the class. How many scores of sheep does each group have? How many does the class have? (a score is 20 sheep)

Counting Sheep or People? Census 2020

Activity 1 Worksheet 1: Sheep Counting Mat



Name: _____ Date: _____



Counting Sheep or People? Census 2020

Activity 2- Lincolnshire Counting Words Grades PreK-2 Teacher Resources and Standards

Activity 2: Lincolnshire Counting Words (World Language) 1 50 minute class period

Students will use counting words from other languages to count popcorn, which represents sheep.

Oklahoma Academic Standards

Activity 2: Lincolnshire Counting Words (World Language)

World Language I can recognize a few memorized words and phrases when I hear them spoken.

Goal 1:

Interpretive

Listening

World Language I can communicate on some very familiar topics using single words and phrases

Goal 1: that I have practiced and memorized.

Interpersonal

Communication

World Language I can reproduce some familiar words, characters, or phrases.

Goal 1:

Presentational

Writing

Materials:

- Popcorn
- Activity 1 Worksheet 1 “**Counting Sheep Mat**”
- Activity 2 “**The Lincolnshire Shepherd**” Reading Page
- Video: The Lincolnshire Shepherd <https://www.youtube.com/watch?v=37RpmLEIkQ>

Procedures

1. Help students practice saying the Lincolnshire counting words below.
2. Students will count their “sheep” as you read the words and use their popcorn to keep track of each score (20) of sheep by sorting the popcorn using the “**Counting Sheep Mat**.”
3. Students will count their sheep as they say the Lincolnshire Counting Words.
4. Listen to “The Lincolnshire Shepherd,” a traditional Irish song:
<https://www.youtube.com/watch?v=37RpmLEIkQ> or read the words included with this lesson.
5. Discuss the rhythm of the counting words and why the rhythm would be helpful when counting.
6. Ask students to write numbers on their counting sheet when they hear that number word. After the song, discuss what numbers they heard and wrote down. (Tan=2, Tethera=3, etc)
7. Discuss counting words in other languages, and use them to count the popcorn “sheep.”

Lincolnshire Counting Words

- | | | | |
|------------|------------|-----------------|--------------------|
| 1. Yan | 6. Sethera | 11. Yan-a-dik | 16. Yan-a-bumfit |
| 2. Tan | 7. Lethera | 12. Tan-a-dik | 17. Tan-a-bumfit |
| 3. Tethera | 8. Hovera | 13. Tethera-dik | 18. Tethera-bumfit |
| 4. Pethera | 9. Covera | 14. Pethera-dik | 19. Pethera-bumfit |
| 5. Pimp | 10. Dik | 15. Bumfit | 20. Figgot |

Translating some of the words into English is difficult. These lyrics closely match the song, but they are not exact.

Chorus (after each verse):

Yan, tan, tethera, tethera, pethera, pimp.
Yon owd ewe's far-weltd, and this ewe's got a limp
Sethera, methera, hovera, and covera up to dik,
Aye, we can deal wi' 'em all, and where's me crook and stick?

I count 'em up to figgits, and figgits has a notch,
There's more to being a shepherd than being on watch;
There's swedes to chop and lambing time and snow upon the rick,
Yan, tan, tethera, and covera up to dik.

From Caistor down to Spilsby from Sleaford up to Brigg,
There's Lincoln sheep all on the chalk, all hung wi' wool and big.
And I, here in Langton wi' this same old flock,
Just like me grandad did afore they meddled with the clock.

We've bred our tups and gimmers for the shape and length and girth,
And sheep have lambed, have gone away all o'er all the earth.
They're bred in foreign flocks to give the wool its length and crimp,
Yan, tan, tethera, pethera, pimp.

They're like a lot of bairns, they are, like youngsters of me own,
They fondle round about owd Shep afore they're strong and grown;
But they gets independent-like, before you know, they've gone,
Yet come 'round next lambing time some more we'll carry on.

Yan, tan, tethera, tethera, pethera, pimp,
Fifteen notches up to now and one ewe with a limp.
You reckons I should go away, you know I'll never go,
For lambing time's on top of us and it'll surely snow.

Now lambing time come reg'lar-like, just as it's always been,
And shepherds have to tend to them till they're strong and weaned
My family did it 'fore I came, they'll have it when I sleep,
So we can count our lambing times as I am countin' sheep.

*swedes= turnips, **bairns = children, ***owd Shep = sheep herder's dog

Counting Sheep or People? Census 2020

Activity 3: Classroom Census, (Math) 1-3 50 minute class periods

Students learn about the Census of 2020 by taking a census of their class and creating a class graph.

Oklahoma Academic Standards

Activity 3: Classroom Census (Math)

- | | |
|---------------------|--|
| PK.D.1.2
K.D.1.2 | Use categorical data to create real-object graphs. |
| K.D.1.3 | Draw conclusions from real-object and picture graphs. |
| 1.D.1.2 | Use data to create picture and bar-type graphs to demonstrate one-to-one correspondence. |
| 1.D.1.3
2.D.1.4 | Draw conclusions from picture and bar-type graphs. |

Materials:

- Pencils, markers, or crayons
- Activity 3 Worksheet 1, 2, or 3 “**Classroom Census**”

Procedures

1. Start by counting the number of students in the class and recording that number on the board. Explain this number is the size of the class, or the population, of the classroom.
2. Take a survey of the students, asking them to raise their hand if they have ever touched a sheep (at the fair, on a farm, etc). Record their answers on the board.
3. Once all answers have been recorded, explain to students that this is a survey and that surveys are used to gather information about groups of people.
4. Discuss the United States census by explaining that just as shepherds count their sheep, it is also helpful to count all people in the United States. Explain:
 - The census is taken once every 10 years, and the next census will begin in April 2020.
 - The U.S. Census Bureau counts the population of states and communities, which means the number of people who live in those places. This helps the government decide how much funding (money) each area needs for things like roads, schools, and parks.
 - It’s important that everyone, both adults and children, be counted in the 2020 Census so that our communities have enough funding for things they need. Listen to “Everyone Counts” song: <https://www.census.gov/programs-surveys/sis/2020census/2020-resources/pre-k/everyone-counts-song.html>
5. Use the “Classroom Census” worksheet to take a class census. *Before you copy it, fill in the chart with the appropriate ages for your students.* Discuss the average age of your class. Ask, how many are older than the average? How many are younger?
6. Visit this website, to learn <https://www.census.gov/schools/facts/oklahoma> to look at some of the data the Census Bureau collects and compare it to the data the class collected. Scroll through all the data to show students what kinds of data the Census Bureau collects.

Counting Sheep or People? Census 2020

Activity 3 Worksheet 1: Classroom Census



Name: _____ Date: _____

The population of the class is the total number of students in our class. The population of the United States is the total number of people in our country. Today we are going to take a census of our class. In April 2020, the United States will take a census of the nation.

How many students are in our class? This is our class population: _____

Surveys are used to get information. Today we will take a survey to find out how old each person in our class is. Ask your classmates how old they are. Color a space for each person you ask.

____ YEARS OLD	____ YEARS OLD	____ YEARS OLD	____ YEARS OLD

