

Come Into My Parlor

Grades 3-5

English Language Arts, Math



Objectives

Students read and answer comprehension questions about milking parlors. Students interpret a map scale to measure the space in a milking parlor. Students will use diagrams of milking parlors to determine the fraction of cows being milked in each one.

Vocabulary

ambles—to walk slowly in a free and relaxed way

automated—to run or operate something by using machines

milking machine—mechanical device used to draw milk from the udders of a dairy animal by use of a vacuum

milking parlor—a room in, or attached to, a barn on a modern dairy farm maintained exclusively for the mechanical milking of cows

udder—the bag-shaped part of a cow, goat, etc., that hangs below the belly and produces milk

Background

Most dairies are **automated**. Gates open and close without the aid of humans and even assist in moving animals along. The map included with this lesson is the floor plan for a style of **milking parlor** called a “Double Three Milking Parlor.” In milking parlors designed in this style, the cow herd is trained to enter the holding area on the east side of the building. Each cow **ambles** into one of the two alleys and enters a prep stall one at a time.

In the prep stall, sprays of warm water clean and stimulate the cow’s **udder**. This pre-milking routine is a vital step in the milking process. It helps increase milk-flow and maintains a healthy udder.

After the pre-milking routine is complete, automated gates open, and the cow enters an unoccupied stall in the milking parlor. She munches on grains and silage while the dairy worker dries her udder and connects it to the **milking machine**. The milking machine can milk one cow in about five minutes. When milking is complete, the dairyman removes the milker, and the cow is allowed to leave through one of the two exit lanes in the parlor.

During the milking process, if the cow needs special attention (runny nose, lame foot) she is herded into one of the catch pens where the dairy worker can examine her and decide what type of medical treatment is needed.

An office with up-to-date information is essential to running a profitable dairy. The dairy operator must keep exact records on matters like milk production, feed, and labor costs.

Other rooms in the floor plan are used for milk handling and storage. Milk pumps housed in the handling room move the milk through a maze of pumps from the parlor to the storage tanks. All rooms in the parlor are kept extremely clean and cool to maintain a high standard of quality.

Come Into My Parlor (continued)

Additional Reading

Aliki, *Milk: From Cow to Carton*, Econo-Clad, 1999.

Murphy, Andy, *Out and About at the Dairy Farm*, Picture Window, 2004.

Peterson, Cris, *Clarabelle: Making Milk and So Much More*, Boyds Mills, 2007.

Taus-Bolstad, Stacy, *From Grass to Milk*, Lerner, 2004.

Llewellyn, Claire, *Milk: What's for Lunch?*, Franklin Watts, 2003.

Websites

<http://perfectparlor.com/double-18-6-cow-prep-or-9-cow-prep/>

<https://wisconsindairyfarmer.wordpress.com/2012/02/11/milking-with-maria-part-1/>

<http://dairyequipments.com/milking-parlor/mpt/>

<https://modernfarmwife.com/2013/03/06/theres-more-than-one-way-to-milk-a-cow/>

<http://www.fao.org/3/s1250e/S1250E12.htm>

Come Into My Parlor

Activity 1- Come Into My Parlor

Grades 3-5 Teacher Resources and Standards

Activity 1: Come Into My Parlor, (ELA) 1 50 minute class period

Students read and answer comprehension questions about milking parlors.

Oklahoma Academic Standards

Activity 1: Come Into My Parlor (ELA)

- | | |
|---------|---|
| 3.2.R.1 | Students will distinguish how key details support the main idea of a passage. |
| 4.2.R.1 | |
| 5.2.R.3 | Students will begin to paraphrase main ideas with supporting details in a text. |

Materials:

- Activity 1 Reading Page: “**Come Into My Parlor**”
- Activity 1 Worksheet 1: “**Come Into My Parlor Comprehension**”

Procedures

1. Read and discuss the background and vocabulary.
2. Hand out the “**Come Into My Parlor**” reading page.
3. Students will discuss the information and answer the “**Come Into My Parlor Comprehension**” questions individually or as a group.

One of the dairy farmer's most important jobs is keeping everything very clean. This helps to make sure bacteria doesn't get into the milk. Bacteria will cause milk to spoil. The invention of the milking machine made it possible for dairy farmers to milk quickly. It also helped them keep everything cleaner than ever before. Not only is this more sanitary, but it also cuts down on the dairy farmers work.



Before the invention of the milking machine, cows were milked by hand. Often cows were milked in the same stalls where they ate and slept. By the early 1930s dairies began to set up special rooms just for milking. These rooms let the dairy farmers move the cows "from the bedroom to the parlor." Back then, the parlor was the name for a fancy room in a person's house. The parlor served as a showplace of a family's wealth.

As news of the milking machines spread, people from nearby towns began to ask if they could come watch. More and more people wanted to watch the cows being milked by a machine. Guests even started coming in from large cities. Non-farm families found the process amazing. Some would take a day and make trip to watch the cows being milked.

Dairy farmers began selling the fresh milk to the guests. Soon the farmer realized this was a great way to sell more milk. Some dairy farmers built nice rooms with large glass windows. These rooms let people watch in comfort. The room could be as fancy as the dairy could afford. It might have chairs in which the guests could sit. Some rooms had a dairy bar from which guests could purchase cream, butter, and fresh milk. Since the rooms were as nice as most people's parlors, they came to be called "milking parlors."

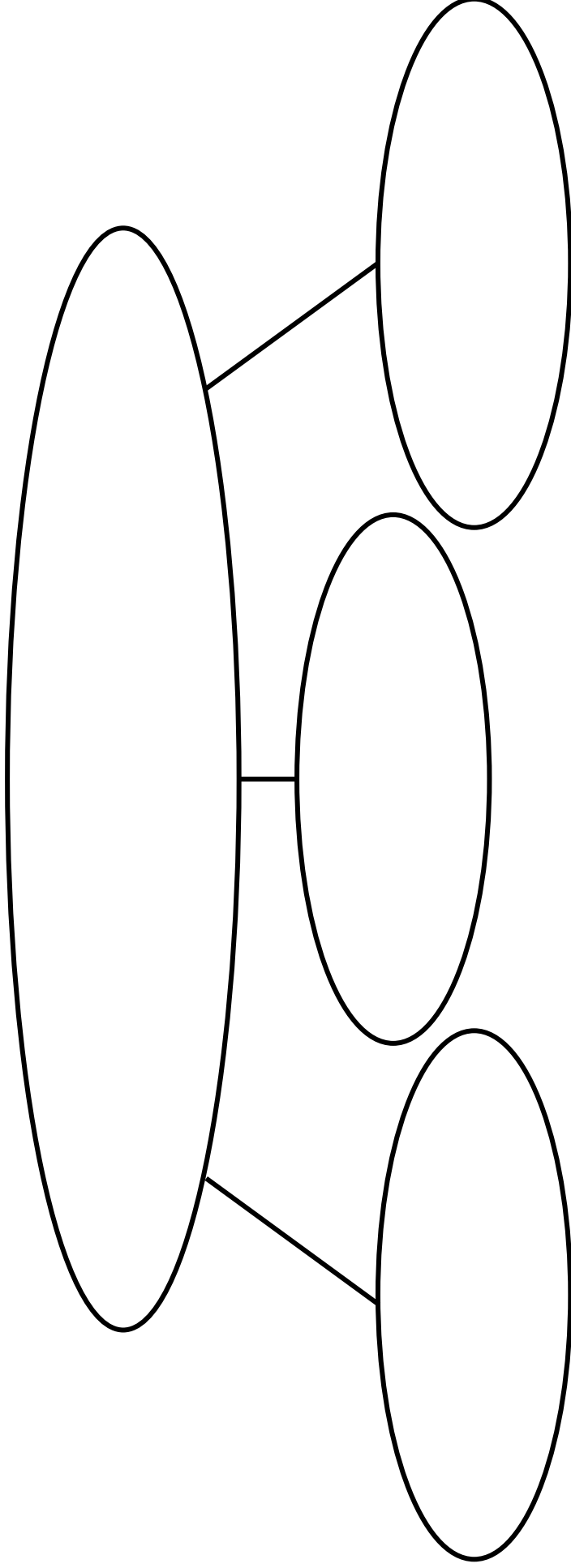
Come Into My Parlor

Activity 1 Worksheet 1: Come Into My Parlor Comprehension



Name: _____ Date: _____

Write the main idea of this passage in the large oval. Write the supporting ideas in the small ovals.



Why do you think non-farm people wanted to watch the cows being milked?

In your own words explain why milking rooms came to be called “milking parlors.”

Come Into My Parlor

Activity 2- Measuring the Milking Parlor

Grades 3-5 Teacher Resources and Standards

Activity 2: Measuring the Milking Parlor, (Math) 1 50 minute class period

Students interpret a map scale to measure the space in a milking parlor.

Oklahoma Academic Standards

Activity 2: Measuring the Milking Parlor (Math)

- | | |
|----------|---|
| 3.GM.2.3 | Choose an appropriate instrument and measure the length of an object to the |
| 4.GM.2.4 | nearest whole centimeter, quarter-inch, or 1/16-inch. |
| 5.GM.3.2 | |

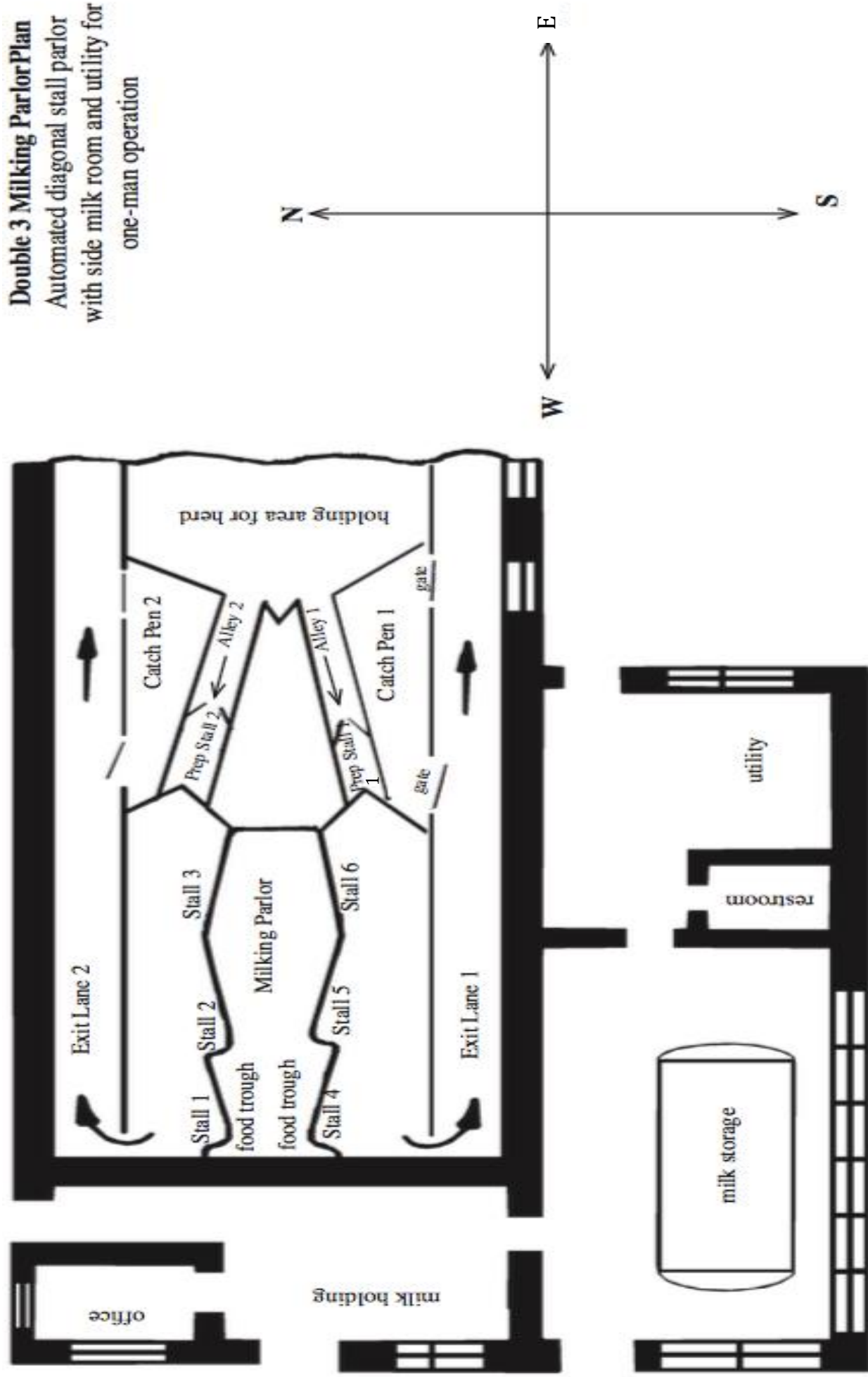
Materials

- Rulers
- Activity 2 Map: “**Milking Parlor Map**”
- Activity 2 Worksheet 1: “**Measuring the Milking Parlor**”

Procedures

1. On a traditional map, review the process of using a map scale to calculate distances.
2. Hand out the “**Milking Parlor Map**” and the “**Measuring the Milking Parlor**” worksheet.
 - Students will use rulers to complete the questions individually or in a group.
 - Students will measure to the nearest centimeter.
3. Invite an architect to the classroom to show blueprints and explain their purpose.

Use a ruler to measure the map. Record your answers on the “Measuring the Milk Parlor” Worksheet.



Come Into My Parlor

Activity 2 Worksheet 1: Measuring the Milking Parlor



Name: _____ Date: _____

Answer the following questions, using the map of the milking parlor and the scale printed on the map, or use a ruler to measure to the nearest cm.

1. Exit Lane 2 is _____ cm long.
2. Move a cow from Prep Stall 1, on the south side of the parlor, to the food trough in Stall 4. What is the distance in cm? _____
3. The cow in Stall 2, on the north side, looks droopy and sick. You need to go to the office to check health records. How far is it? _____ cm
4. The cow in Stall 4 and the cow in Stall 5, on the south side, are head butting each other. Move the cow in Stall 5 to Stall 6 on the south side. Measure the distance from Stall 5 to Stall 6. How many cm? _____
5. A cow moves from the west side of the Holding Area through Alley 2 to Stall 3. How far is that in cm? _____
6. Measure diagonally across the milking parlor from the northwest corner to the southeast corner. How many cm? _____
7. You need a wrench to repair a milk pipe. Measure from the doorway of the milk holding room to the doorway of the utility room. _____ cm
8. Measure the perimeter of the whole milking parlor. _____ cm
9. Use the compass rose: what corner of the dairy building is the milk storage room in? _____

Come Into My Parlor

Activity 2 Worksheet 1: Measuring the Milking Parlor (ANSWERS)



Name: _____ Date: _____

Answer the following questions, using the map of the milking parlor and the scale printed on the map, or use a ruler to measure to the nearest cm.

1. Exit Lane 2 is 12 cm long.
2. Move a cow from Prep Stall 1, on the south side of the parlor, to the food trough in Stall 4. What is the distance in cm? 6 cm
3. The cow in Stall 2, on the north side, looks droopy and sick. You need to go to the office to check health records. How far is it? 4 cm
4. The cow in Stall 4 and the cow in Stall 5, on the south side, are head butting each other. Move the cow in Stall 5 to Stall 6 on the south side. Measure the distance from Stall 5 to Stall 6. How many cm? 2 cm
5. A cow moves from the west side of the Holding Area through Alley 2 to Stall 3. How far is that in cm? 7 cm
6. Measure diagonally across the milking parlor from the northwest corner to the southeast corner. How many cm? 14 cm
7. You need a wrench to repair a milk pipe. Measure from the doorway of the milk holding room to the doorway of the utility room. 6 cm
8. Measure the perimeter of the whole milking parlor. 60 cm
9. Use the compass rose: what corner of the dairy building is the milk storage room in? SW

Come Into My Parlor

Activity 3: Fractions in the Milking Parlor, (Math) 1 50 minute class period

Students will use diagrams of milking parlors to determine the fraction of cows being milked in each one.

Oklahoma Academic Standards

Activity 3: Fractions in the Milking Parlor (Math)

3.N.3.1 Read and write fractions with words and symbols.

4.N.2.1 Represent and rename equivalent fractions using fraction models.

Materials

- Activity 3 Worksheets 1, 2, and 3: “**Fractions in the Milking Parlor**”

Procedures

1. Students will use diagrams of milking parlors to determine the fraction of cows being milked on the “**Fractions in the Milking Parlor**” worksheets.

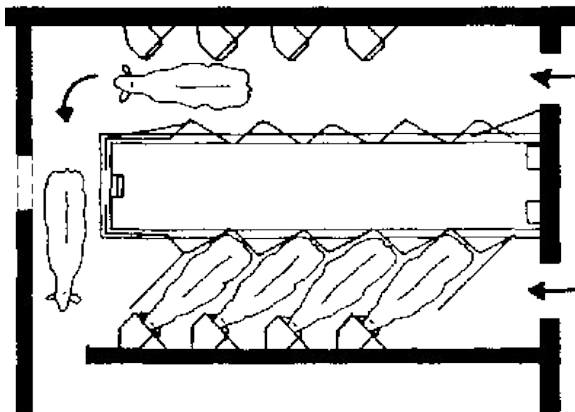
Come Into My Parlor

Activity 3 Worksheet 1: Fractions in the Milking Parlor

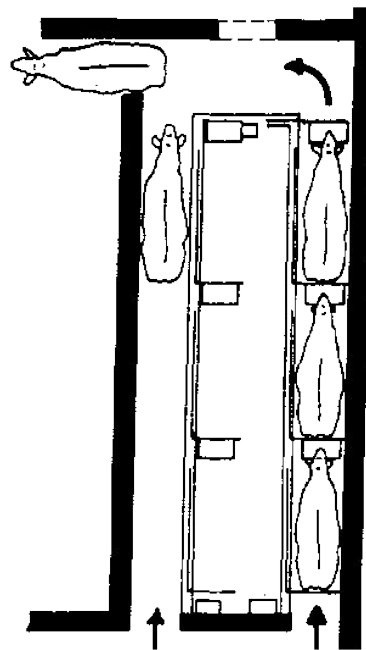


Name: _____ Date: _____

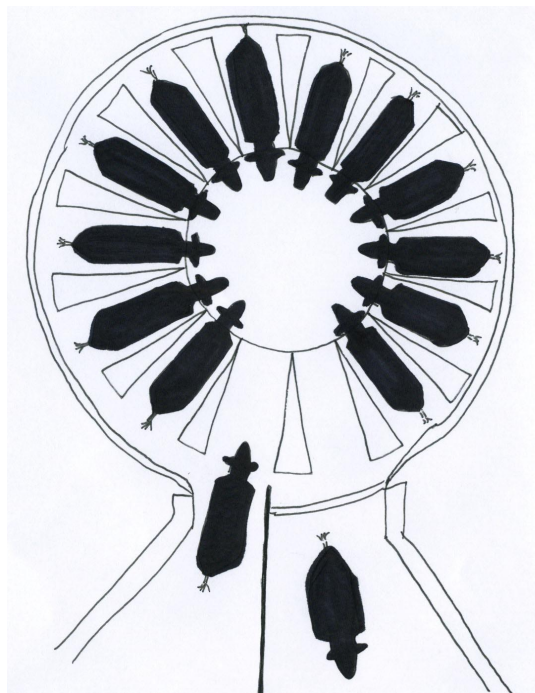
Use the diagrams to determine what fraction of cows are being milked in each drawing. If the cow is completely in the stall, it is being milked. If it is walking out of the stall, or walking in the alley way, it is not being milked.



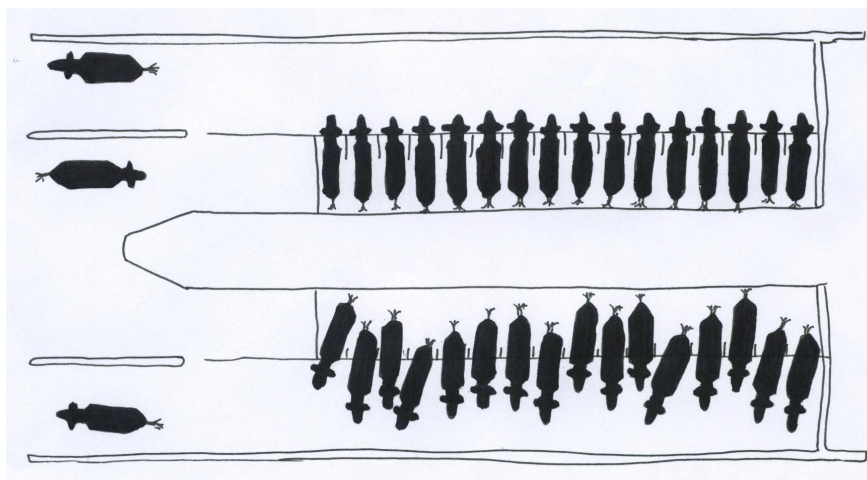
1. What fraction of cows is being milked? _____



2. What fraction of cows is being milked? _____



3. What fraction of cows is being milked? _____



4. What fraction of cows is being milked? _____

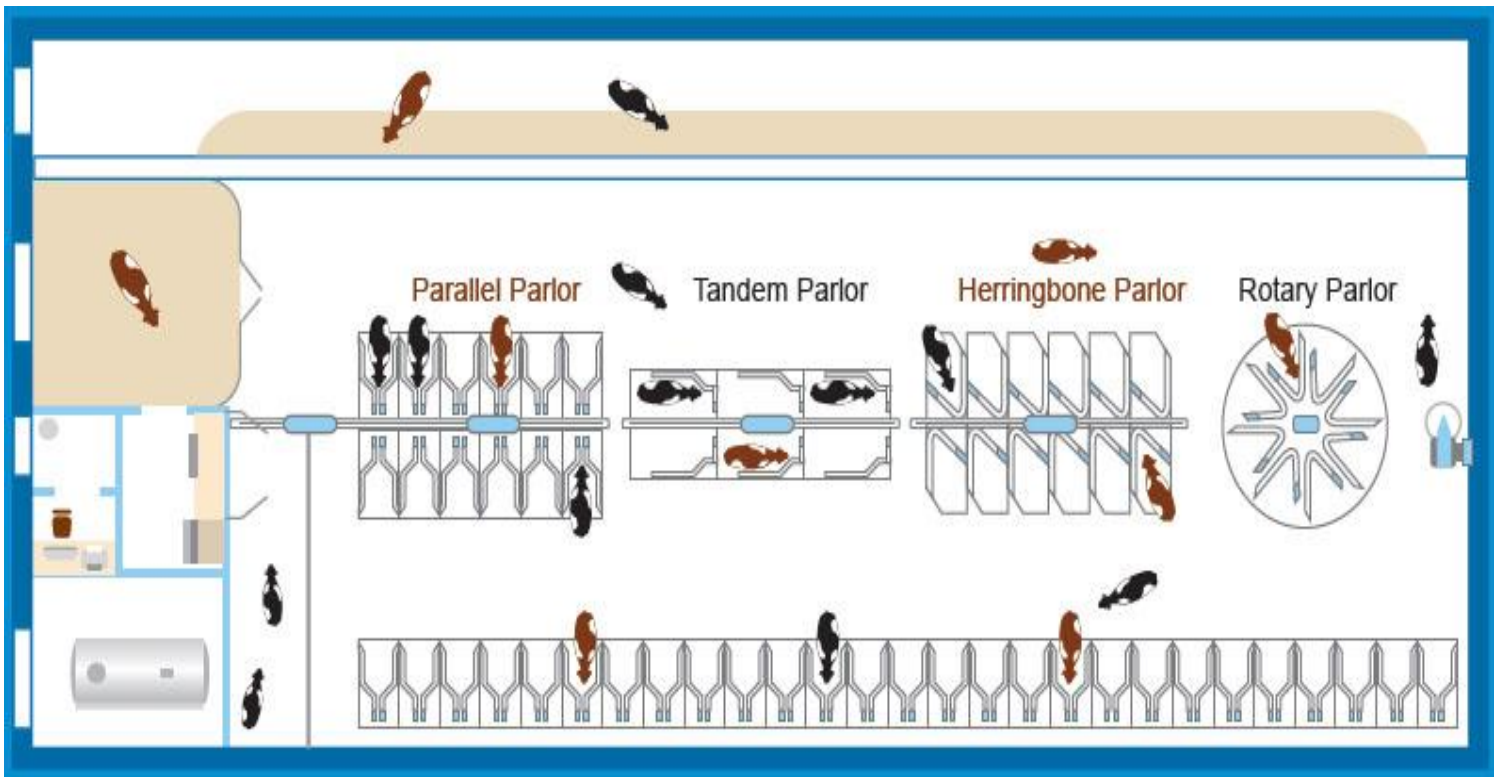
Come Into My Parlor

Activity 3 Worksheet 2: Fractions in the Milking Parlor



Name: _____ Date: _____

Use the diagrams to determine what fraction of cows are being milked in each drawing. If the cow is completely in the stall, it is being milked. If it is walking out of the stall, or walking in the alley way, it is not being milked.



1. What fraction of the cow herd is being milked in the Parallel Parlor? _____
2. What fraction of the cow herd is being milked in the Tandem Parlor? _____
3. What fraction of the cow herd is being milked in the Herringbone Parlor? _____
4. What fraction of the cow herd is being milked in the Rotary Parlor? _____
5. What fraction of the cow herd is not being milked? _____
6. What fraction of the cow herd is not in a stall at all? _____
7. What fraction of the herd is in the stalls at the bottom of the picture? _____

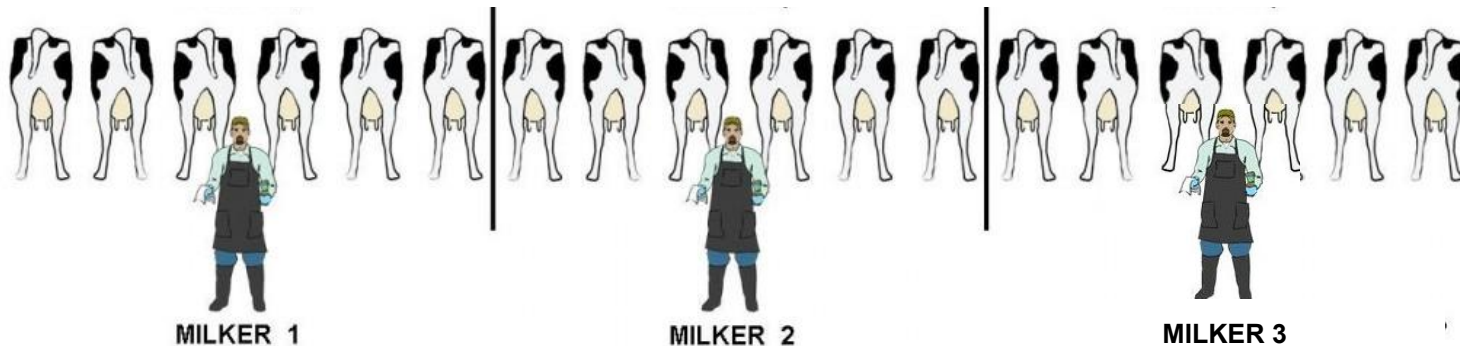
Come Into My Parlor

Activity 3 Worksheet 3: Fractions in the Milking Parlor

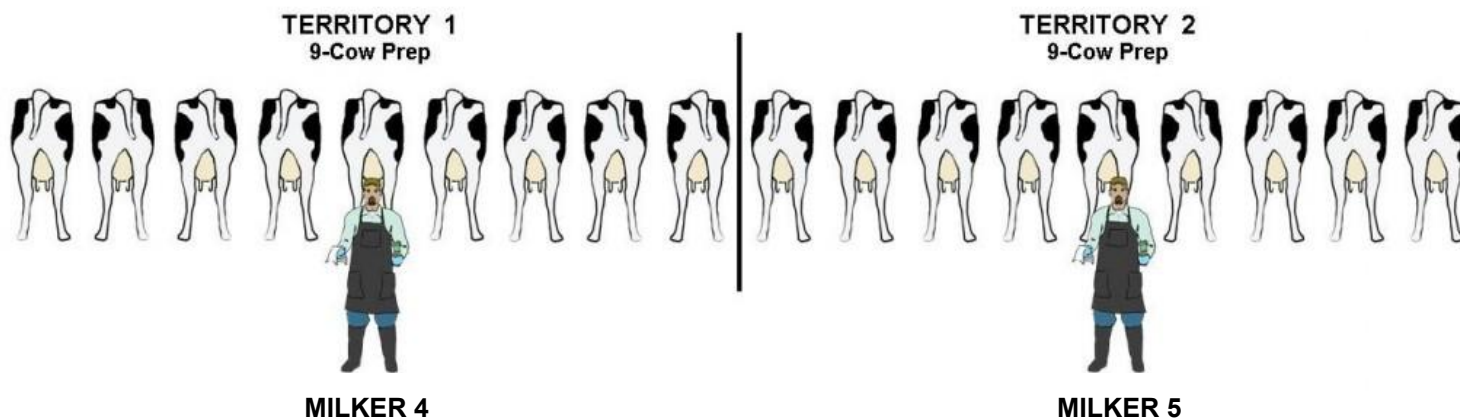


Name: _____ Date: _____

Use the diagrams to determine what fraction of cows each farmer will be milking.



OR...



1. What fraction of the cow herd is Milker 1 going to milk? _____
2. What fraction of the cow herd are Milker's 2 and 3 going to milk together? _____
3. What fraction of the cow herd will Milker 5 milk? _____
4. If it takes 5 minutes to milk 1 cow, how many cows can be milked in 1 hour? _____
5. What fraction of the cow herd will be milked in 1 hour? _____
6. How many minutes will it take to milk all of the cows? _____

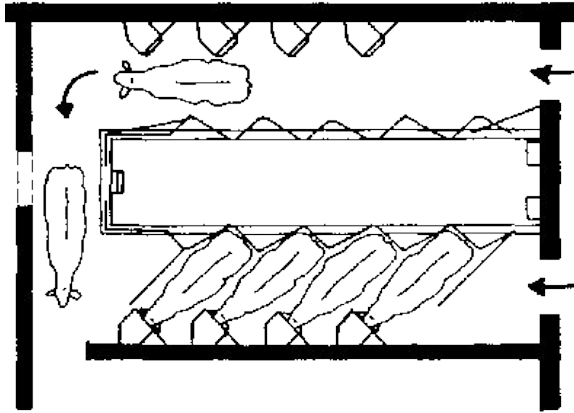
Come Into My Parlor

Activity 3 Worksheet 1: Fractions in the Milking Parlor (ANSWERS)

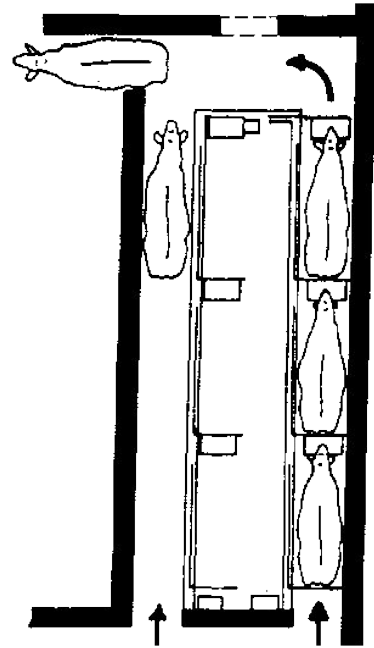


Name: _____ Date: _____

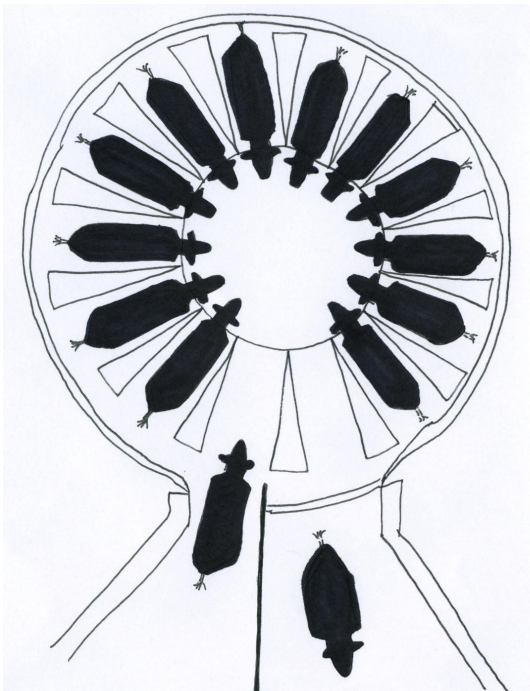
Use the diagrams to determine what fraction of cows are being milked in each drawing. If the cow is completely in the stall, it is being milked. If it is walking out of the stall, or walking in the alley way, it is not being milked.



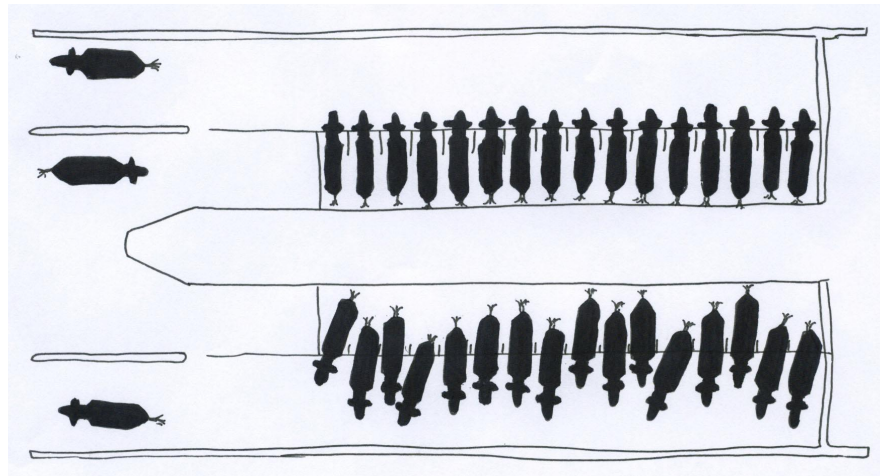
1. What fraction of cows is being milked?
4/6 OR 2/3



2. What fraction of cows is being milked?
3/5



3. What fraction of cows is being milked?
12/14 OR 6/7



4. What fraction of cows is being milked?
18/35

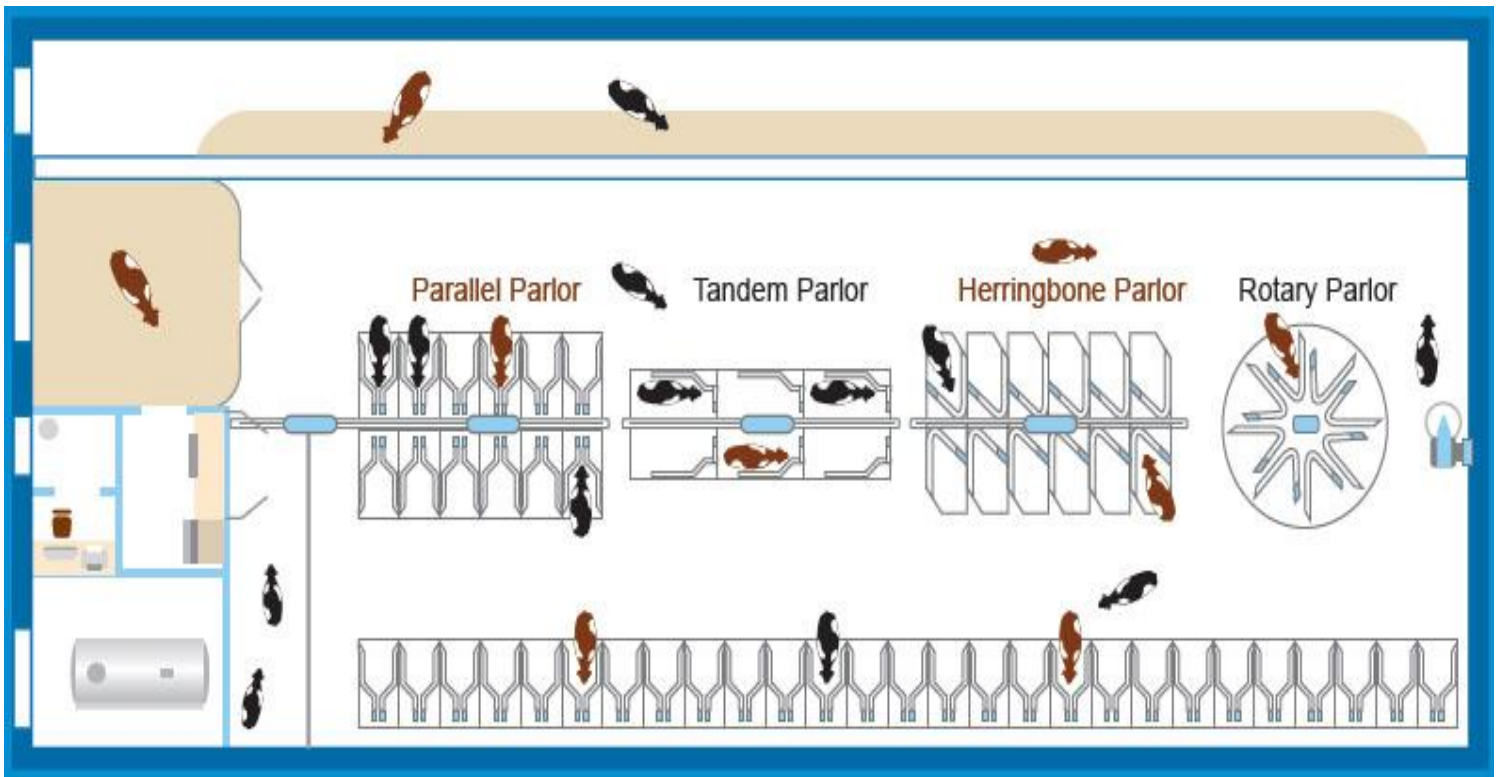
Come Into My Parlor

Activity 3 Worksheet 2: Fractions in the Milking Parlor (ANSWERS)



Name: _____ Date: _____

Use the diagrams to determine what fraction of cows are being milked in each drawing. If the cow is completely in the stall, it is being milked. If it is walking out of the stall, or walking in the alley way, it is not being milked.



1. What fraction of the cow herd is being milked in the Parallel Parlor? 4/22 OR 2/11
2. What fraction of the cow herd is being milked in the Tandem Parlor? 3/22
3. What fraction of the cow herd is being milked in the Herringbone Parlor? 2/22 OR 1/11
4. What fraction of the cow herd is being milked in the Rotary Parlor? 1/22
5. What fraction of the cow herd is not being milked? 12/22 OR 6/11
6. What fraction of the cow herd is not in a stall at all? 9/22
7. What fraction of the herd is in the stalls at the bottom of the picture? 3/22

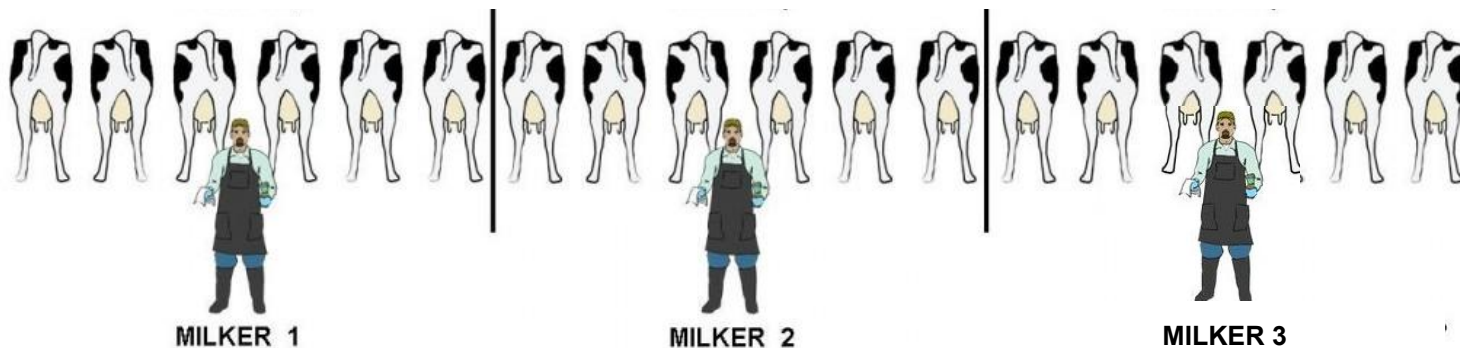
Come Into My Parlor

Activity 3 Worksheet 3: Fractions in the Milking Parlor (ANSWERS)

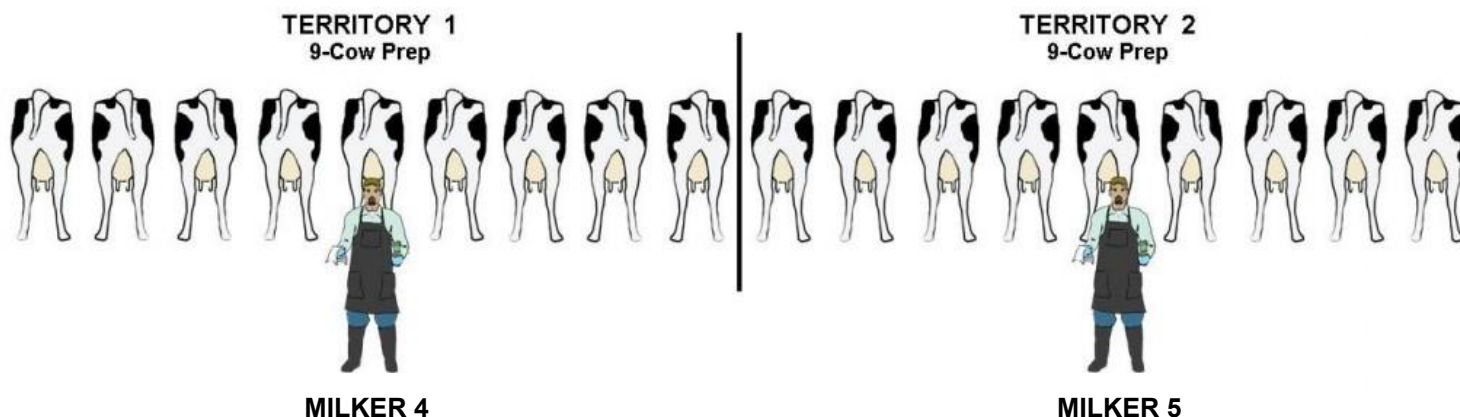


Name: _____ Date: _____

Use the diagrams to determine what fraction of cows each farmer will be milking.



OR...



1. What fraction of the cow herd is Milker 1 going to milk? 6/36 OR 1/6
2. What fraction of the cow herd are Milker's 2 and 3 going to milk together? 12/36 OR 1/3
3. What fraction of the cow herd will Milker 5 milk? 9/36 OR 1/4
4. If it takes 5 minutes to milk 1 cow, how many cows can be milked in 1 hour? 12
5. What fraction of the cow herd will be milked in 1 hour? 12/36 OR 1/3
6. How many minutes will it take to milk all of the cows? 180 MINUTES