



1

Dairy cows produce a lot of milk! Count the gallons of milk on the banner to see how many gallons one cow can produce in a day. _____

2

The most common breed of dairy cow in the U.S. is called a Holstein. Holsteins have a black and white color pattern. What breed of cows is on the banner?

3

Dairy cows are often milked about 12 hours apart, once in the morning and once in the evening. If you were a dairy farmer and milked at 5:00 in the morning, at what time would you milk in the evening? _____

4

It takes 12 gallons of milk to make one gallon of ice cream. What is your favorite flavor of ice cream? _____

Dairy
EMERGING AGGIES
7-9 YEARS OLD



1 Caring for the dairy cows is an important part of a successful dairy farm. Dairy farmers take excellent care of their cows. If you were a dairy farmer, what would be important to keep in mind about an animal's feed and water?

2 A milking machine is placed on the cow's udder to collect milk. A milking machine is made up of four teat cups and a milk tube that removes the milk from the cups. How long do you think it takes to milk one animal using the milk machine? _____

3 After a dairy cow has been milked, farmers properly seal the teat cavity so no bacteria is able to get in. Most dairy farmers use a hand held teat dipper to do this. Why do you think we would want cows to have clean udders when they provide us milk? _____

4 Once the milk has been collected, it is then filtered through stainless steel pipes and placed into a pasteurizer. A pasteurizer heats up the milk to kill any bacteria that might be present. By doing this it not only keeps us safer but it helps the milk to have a longer shelf life. How long do you think milk lasts?

Answers: 1) Providing fresh feed and water 2) Approximately 5 min 3) safe milk and healthy animals 4) Always good to follow the best by date, however when milk is refrigerated below 40 degrees F once pasteurized, that it can last 5-7 days after printed date



1

Dairy farmers need to know their cows' body temperature, appetite, and activity level so their cows can stay healthy. RFID technology in collars and ear tags help farmers keep records. Once the cow enters the parlor to be milked, the collar or tag is scanned just like we would scan a bar code at a grocery store. Information is automatically logged about the cow. How much do you think one RFID collar costs? _____

2

Milk is tested many times before it gets to your grocery store. Dairy farmers test the milk, the tanker truck driver tests the milk and the processor tests the milk. Assume a cow produces 6 gallons of milk per day. If there are 16 cups in 1 gallon, how many cups of milk does the cow produce each day? _____

3

Milk is pumped into a large storage tank on the farm and quickly cooled to keep it fresh. Fresh milk is driven from a farm to a local processing plant in a truck. The trucks that transport the milk are insulated and keep the milk chilled during transportation. Out of the two trucks on the banner, which do you think is used to transport milk? _____

4

Dairy farmers are stewards of the land. They are always looking for opportunities to reuse, recycle and conserve water. On farms, water is used for drinking, washing and chilling milk. Milk leaves a cow's body at 101 degrees, and water is used to quickly chill it to about 38 degrees. What is the difference in temperature from when it comes out of a cow's udder to being chilled by water? _____