Cheese, Please!

Check out the cheese section at the grocery store. You’ll see square cheese, round cheese, and long, skinny cheese. You’ll see hard cheese, soft cheese, and crumbly cheese. Cheese is so popular that more than 300 different kinds are made in the United States alone. Around the world there are more than 2,000 different kinds of cheese!

All kinds of cheese have one thing in common. Their main ingredient is milk. So how does milk end up as cheese? Let’s take a look at how a popular cheese, called cheddar, is made.

Cows, Culture, and Curds

The cheese-making process begins with carefully tended dairy cows. Dairy farmers know that it takes high-quality milk to make good cheese. The farmers keep their cows healthy and happy. This includes feeding the cows nutritious food and making sure they have lots of water.

The milk from a dairy farm is taken to a cheese-making factory. Here the milk is heated to kill germs and then cooled quickly. This process is called pasteurization. Next, the milk is poured into a large storage tub, or vat. Special ingredients are added and the milk turns into a big mass of developing cheese. Next, sharp wires are used to cut the cheese mass into small cubes. The cubes are called curds. There is liquid too. It is called whey.

The Final Steps

After the whey is drained, salt is added for flavor. Sometimes coloring is added to make the cheese orange or yellow. Then the curds are pressed into 42-pound blocks of cheddar cheese. These big blocks of cheese are placed in a special warehouse to age. Mild cheddar cheese is aged for two to three months. Extra sharp cheddar cheese might be aged for a year. The longer cheese is aged, the sharper its flavor becomes. When the cheese is ready to be sold, it is cut and packaged. Then it is put on a truck and delivered to a grocery store near you!

Write the answers.

1. About how many different kinds of cheese are made in the United States? __________________________

2. About how many different kinds of cheese are made around the world? __________________________

3. What are two things dairy farmers make sure their cows have? ____________________________________

4. What happens during the pasteurization of milk? _____________________________________________

5. Why is sharp cheddar cheese aged longer than mild cheddar cheese? ___________________________

Bonus: Define the word vat. Explain how a vat is used in the cheese-making process.
1. more than 300
2. more than 2,000
3. nutritious food and lots of water
4. Milk is heated to kill germs and then cooled quickly.
5. The longer cheese is aged, the sharper its flavor becomes.

Bonus: A vat is a large storage tub. After the milk is pasteurized, it is poured in a vat to become cheese.
Squeak E. Mouse is eight years old. He needs to have 800 milligrams (mg) of calcium every day to build strong bones and teeth. Use the chart. Find out how much calcium Squeak has each day. Use the circled letters to solve the riddle below.

**Monday**, Squeak has 1 cup of cottage cheese, 2 ounces of cheddar cheese, and 1 cup of milk.

\[ \text{Monday: } 1 \text{ cup cottage cheese} + 2 \text{ ounces cheddar cheese} + 1 \text{ cup milk} = 500 \text{ mg} \]

**Tuesday**, he has 1 ounce of mozzarella cheese, 1 cup of yogurt, and 1 ounce of cheddar cheese.

\[ \text{Tuesday: } 1 \text{ ounce mozzarella cheese} + 1 \text{ cup yogurt} + 1 \text{ ounce cheddar cheese} = 312 \text{ mg} \]

**Wednesday**, Squeak has 2 cups of milk, \( \frac{1}{2} \) cup of cottage cheese, and 1 ounce of cheddar cheese.

\[ \text{Wednesday: } 2 \text{ cups milk} + \frac{1}{2} \text{ cup cottage cheese} + 1 \text{ ounce cheddar cheese} = 708 \text{ mg} \]

**Thursday**, he has 1 cup of cottage cheese, 1 cup of yogurt, and 1 cup of milk.

\[ \text{Thursday: } 1 \text{ cup cottage cheese} + 1 \text{ cup yogurt} + 1 \text{ cup milk} = 708 \text{ mg} \]

**Friday**, Squeak has 1 cup of milk, 1 ounce of cheddar cheese, and 2 cups of cottage cheese.

\[ \text{Friday: } 1 \text{ cup milk} + 1 \text{ ounce cheddar cheese} + 2 \text{ cups cottage cheese} = 915 \text{ mg} \]

**Saturday**, he has 2 ounces of mozzarella cheese, 1 cup of cottage cheese, and 1 cup of milk.

\[ \text{Saturday: } 2 \text{ ounces mozzarella cheese} + 1 \text{ cup cottage cheese} + 1 \text{ cup milk} = 915 \text{ mg} \]

**Sunday**, Squeak has 1 ounce of mozzarella cheese, 1 cup of yogurt, and 1 cup of milk.

\[ \text{Sunday: } 1 \text{ ounce mozzarella cheese} + 1 \text{ cup yogurt} + 1 \text{ cup milk} = 915 \text{ mg} \]

What do mice use to floss their teeth?

To find out, write the circled letter on its matching line or lines.

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<thead>
<tr>
<th>G</th>
<th>C</th>
<th>908</th>
<th>920</th>
<th>920</th>
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<th>!</th>
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# Answer Key

**“A Dairy Lovin’ Mouse!”**

(3.OA.D.8)

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<tr>
<th>Day</th>
<th>Amount (mg)</th>
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<tr>
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<td>811 mg</td>
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<td>Wednesday</td>
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<td>Saturday</td>
<td>922 mg</td>
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<tr>
<td>Sunday</td>
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STRING CHEESE!