Junior Lesson Plan 5

From Grass to your Glass

Objective

To develop pupils' awareness of the importance of dairy farming and their understanding of everyday life on a farm. Duration: **30 minutes** (approximately).

Curricular Links

Geography:

Human environments ⇨ Living in the local community ⇨ People at work

Words of the Day

Grazing – Animals, like cows, feeding on growing grass.

Pasteurisation – The heating of milk to a high temperature for a short time (e.g. 72 degrees Celsius for 15 seconds) and then cooling it really quickly.

Homogenisation – When the cream particles in milk are spread evenly throughout the milk so that the cream doesn't rise to the top.

Milking Parlour – A building on a dairy farm which is used for milking cows.

Class Discussion

Pass the Beanbag - Ask pupils to share their prior knowledge / experience of dairy farming by passing a beanbag around the class. Pupils who have the beanbag share with the class. Prompt Questions:

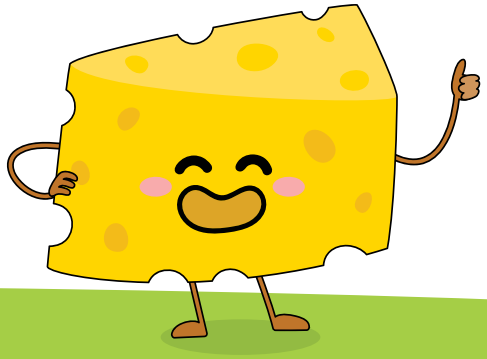
1. What is dairy? (It is food like milk, yogurt and cheese).
2. What is dairy farming? (It is the type of farming which produces dairy products like milk, yogurt and cheese).
3. What animals do you think you would see on a dairy farm? (Cows).
4. Have you been to a dairy farm? Describe what you might see on a dairy farm, (e.g. cows, a milking parlour, milking machines, silage, hay).

Pair Discussion

Ask pupils to think about how farmers take care of cows on a dairy farm, discuss their ideas with a partner and share with the class.

Prompts for discussion:

- Farmers have bedding for cows to sleep.
- Farmers can leave cows grazing on fresh grass outdoors for an average of 240 days a year.
- Farmers move cows from field to field so that they have enough grass to eat.
- Farmers bring cows indoors to shelter during the cold winter months.
- Farmers make sure cows have food like silage and maize to eat.
- Farmers keep the cow sheds and milking parlours clean.
- Farmers make sure that a vet visits the farm to make sure that the cows stay healthy.



Pair Activity

Begin by asking pupils as a class to think about how milk gets from a farm to a glass on the kitchen table. Note initial discussion points on the board. Then give each pupil a copy of the '**From Grass to your Glass**' activity sheet. Ask groups to look at the 8 stages of milk production 'From Grass to your Glass', to discuss and then number them, sequencing in the correct order. Discuss the correct sequence as a class, talking through each of the stages in the milk production process. *(Correct sequence outlined on page 23).

Personal Activity

Ask pupils to write about how milk gets 'From Grass to your Glass' in their own words.

Extension Activities

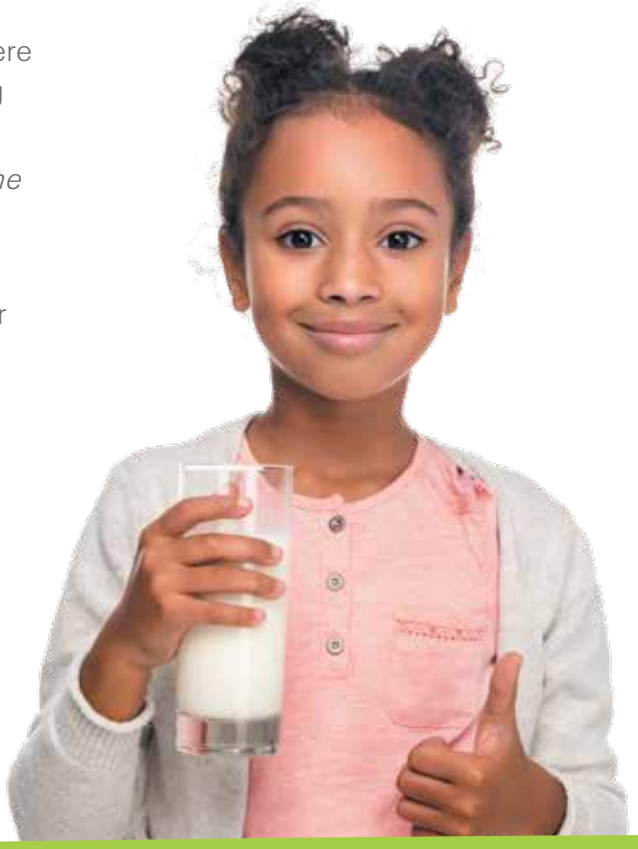
1. Ask pupils to imagine they are dairy farmers and to design their own milk carton.
2. Ask pupils in groups to create their own class / school 'From Grass to your Glass' poster.

Bring it Home

Encourage your pupils to take home the message of the importance of dairy farming.

As a homework activity, you can ask your pupils to:

1. Look at dairy products in the fridge and identify where they were sourced from. For example, was anything sourced from a local farm?
2. Does milk in their fridge carry the NDC '*Farmed in the Republic of Ireland*' guarantee?
3. Do they know a local dairy farmer?
4. Record how many litres of milk each family member has for a week. Compare.



From Grass to your Glass - The 8 stages of milk production

Stage 1 – Cows are fed on nutritious fresh grass.

Stage 2 – Cows are milked twice a day in the milking parlour. The milk collected is stored below 4° Celsius in a milk tank and is collected from the farm by refrigerated tankers every 2-3 days.

Stage 3 – Before collecting milk from the farmer, the driver takes samples to test the quality of the milk.

Stage 4 – When the driver arrives at the dairy, he pumps the milk out of his tanker into large, refrigerated container tanks. The tanker is then carefully washed inside so it is ready for the next day's collection.

Stage 5 – The milk is tested again at the dairy by a laboratory worker.

Stage 6 – The milk is pasteurised to make sure there are no germs in it. Pasteurisation, invented by Louis Pasteur, is when the milk is heated to a high temperature for a short time and then cooled really quickly.

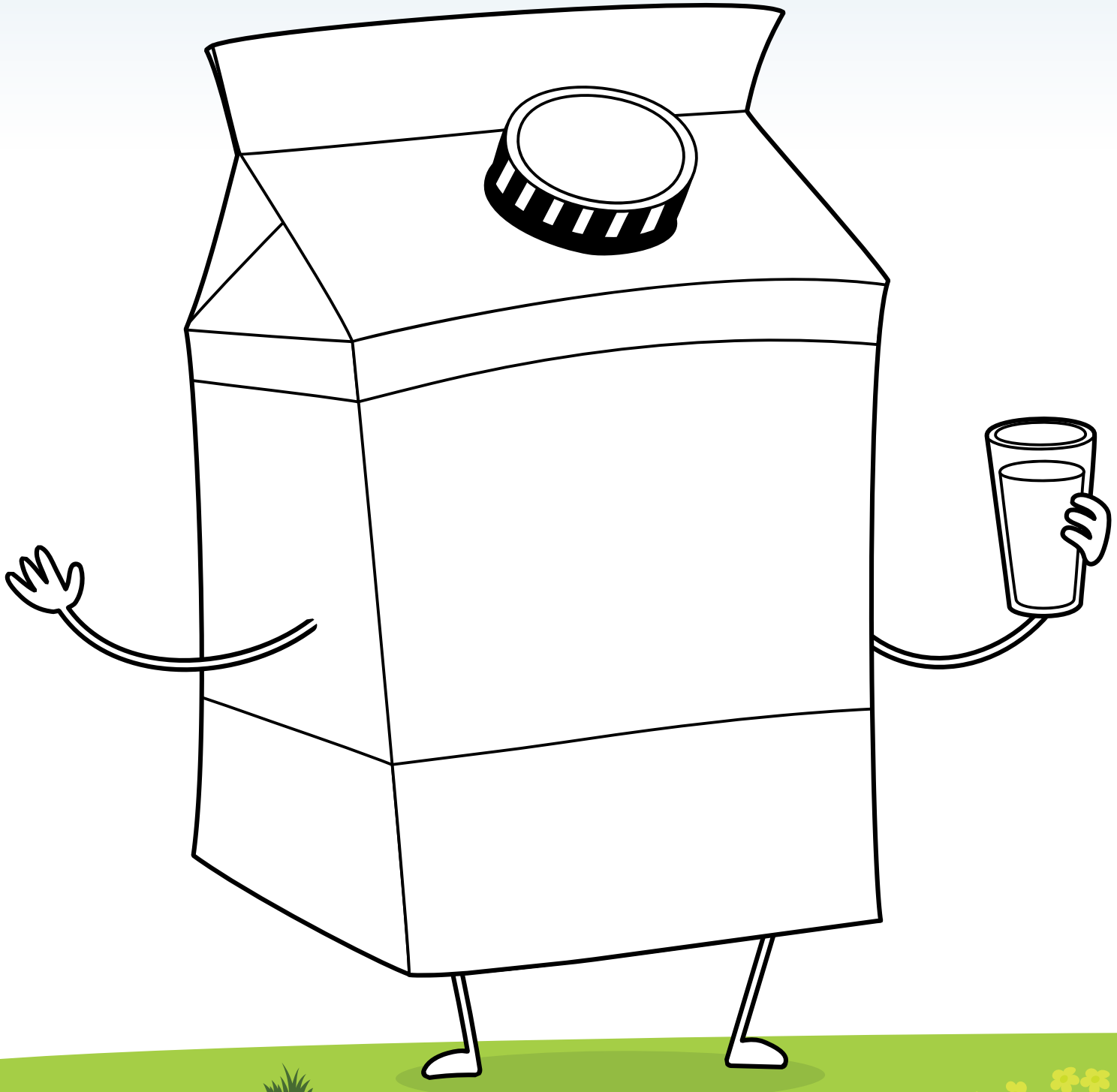
Stage 7 – The milk is then filled into various containers. After that, lorries are loaded with crates of milk for delivery to the home or to the shop. Some of it is delivered straight to schools.

Stage 8 – So the next time you enjoy a delicious glass of milk, you can be sure you're drinking a high quality, natural and nutritious drink.

Get Creative!

Design your own School Milk Carton.

You can include pictures of grass, cows, farmers or keep it simple and just draw a splash of delicious fresh milk!



Recipe Challenge

Why not reduce your waste by making the most of leftover fruit and vegetables? You can create your own sumptuous smoothie using fast-ripening berries, bananas and apples. Or you could create your very own signature soup using a variety of vegetables that are wilting or leftover at the end of the week. Be sure to get some help in the kitchen when using sharp utensils and cooking appliances. Enjoy!

Draw a picture here

Ingredients

(list ingredients and quantities, e.g. half a chopped onion)

Directions

(Describe how to make the smoothie or soup, e.g. gently heat oil in a saucepan and cook the onion until soft)