

Explore & Discover

with Farmer Lily



RHET

The Royal Highland Education Trust

Patron HRH The Princess Royal

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INTRODUCTION

The Royal Highland Education Trust (RHET) provides food, farming and countryside education to young people and teachers across Scotland.

Farmers throughout Scotland produce a wide variety of different foods that we consume every day. From our breakfast toast/cereal with milk, to vegetable soup/ham sandwich lunch through to our beef pie, chips and peas/omelette at teatime. All the produce - the cereals, milk, cheese, meat, vegetables, eggs and fruits can come from a farm near you.

Looking out for the Scottish flag on products in the shops and ask questions about where your food comes from. By supporting local producers you can help ensure we continue to receive great quality products from our farmers.

At early years level we are able to:

1. **Offer learning boxes** which contain a variety of props and ideas to help teach food and farming, as well as linking into health and wellbeing. For further information on our learning boxes please visit <https://www.rhet.org.uk/teachers/in-school-learning/book-an-early-years-resource-box/>
2. Provide information and activities to get involved with **making reindeer dust**. Further information on this project can be found here: <https://www.rhet.org.uk/teachers/resource-portal/reindeer-dust/reindeer-dust-resources/>
3. Come into class and speak to your pupils about food production (subject to availability)
4. Offer online sessions to meet your class needs

HOW THIS PACK IS ORGANISED

We all need to eat, and finding out where food comes from and having the opportunity to try new foods is important from an early age.

The activities in this pack link into the following areas of the Curriculum for Excellence (CfE):

I have the freedom to discover and choose ways to create images and objects using a variety of materials. EXA 0-02a

I enjoy eating a diversity of foods in a range of social situations. HWB 0-29a

Together we enjoy handling, tasting, talking and learning about different foods, discovering ways in which eating and drinking may help us to grow and keep healthy. HWB 0-30a

I know that people need different kinds of food to keep them healthy. HWB 0-32a

I explore and discover where foods come from as I choose, prepare and taste different foods. HWB 0-35a

I have helped to grow plants and can name their basic parts. I can talk about how they grow and what I need to do to look after them. SCN 0-03a

This pack is organised into the following sections:

TEACHER SHEETS

FARM CROPS

FARM ANIMALS

Within each section you will find **information** (teachers sheets) and **activities** (activity sheets) to share with your class. There is a certificate at the back of the booklet, for children completing a range of activities from each section.

Teachers Sheets



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TEACHERS SHEET

Farmers across Scotland grow a range of different crops such as Wheat, Barley and Oats (cereal crops); Potatoes; vegetables (carrots, peas, leeks, beetroot, parsnips, cauliflower, broccoli, cabbage, lettuce) soft fruit (strawberries, raspberries, blackcurrants, blueberries) and tree fruit (cherries, apples, pears) They also keep cows for meat and milk, sheep for meat and wool and pigs for meat.

Use **activity sheet 1 (cereal matching game)** to look at the different plants that farmers grow in the fields. The children might recognise some of the plants. If you can bring in some of the foods that the crops are made into, this helps bring the seed story to life.

The wheat seed story is the easiest one to tell as most children eat the final bread product. Use **activity sheet 2 (the story of wheat)** to tell the story of the wheat seed on its journey to becoming flour. You can request FREE WHEAT SEEDS to grow with your class at <https://www.rhet.org.uk/teachers/in-school-learning/request-grow-your-own-loaf-seeds/>

Look at the colour changes in the wheat plant - it starts as a shiny green, moves to a dark green and then to a golden colour. You could also look at the colour of flour, which varies from white to brown depending on how much bran is kept in during the grinding process.

Use **activity sheet 3 (planting a seed)** to have a go at getting everyone to make a paper pot. This is an activity best carried out in small groups. The instructions show the pot being made using a glue stick to roll the paper round, however anything round and similar in shape is suitable. Try to use peat free compost, as it is more sustainable and be very careful with watering the seeds. The paper pots will disintegrate if they are over-watered.

Use **activity sheet 4 (growing cereals)** to introduce some new vocabulary. As you read out the statements - get your class, to match the picture to the words you are reading and stick the picture next to (or on top of the words). What does slurry smell like? What wiggly creatures might the farmer find as he turns over his soil? (worms) How do you think the round bales stay in one piece? (wrapped up like parcels) Can bales be any other shapes? (small and large rectangles).

Why not have a go at singing "The Wheels on the Tractor" song, sung to the tune of 'The Wheels on the Bus', that covers the different steps involved in planting seeds.

There are also actions for your class to try.



The **Wheels** of the tractor go round and round, all day long
(draw circles with hands)

The **Farmer** on the tractor goes up and down, all day long
(bending knees)

The **Plough** on the tractor rolls the soil over, all day long
(arms roll round)

The **Harrow** on the tractor chops the ground up, all day long
(chopping action with vertical hands)

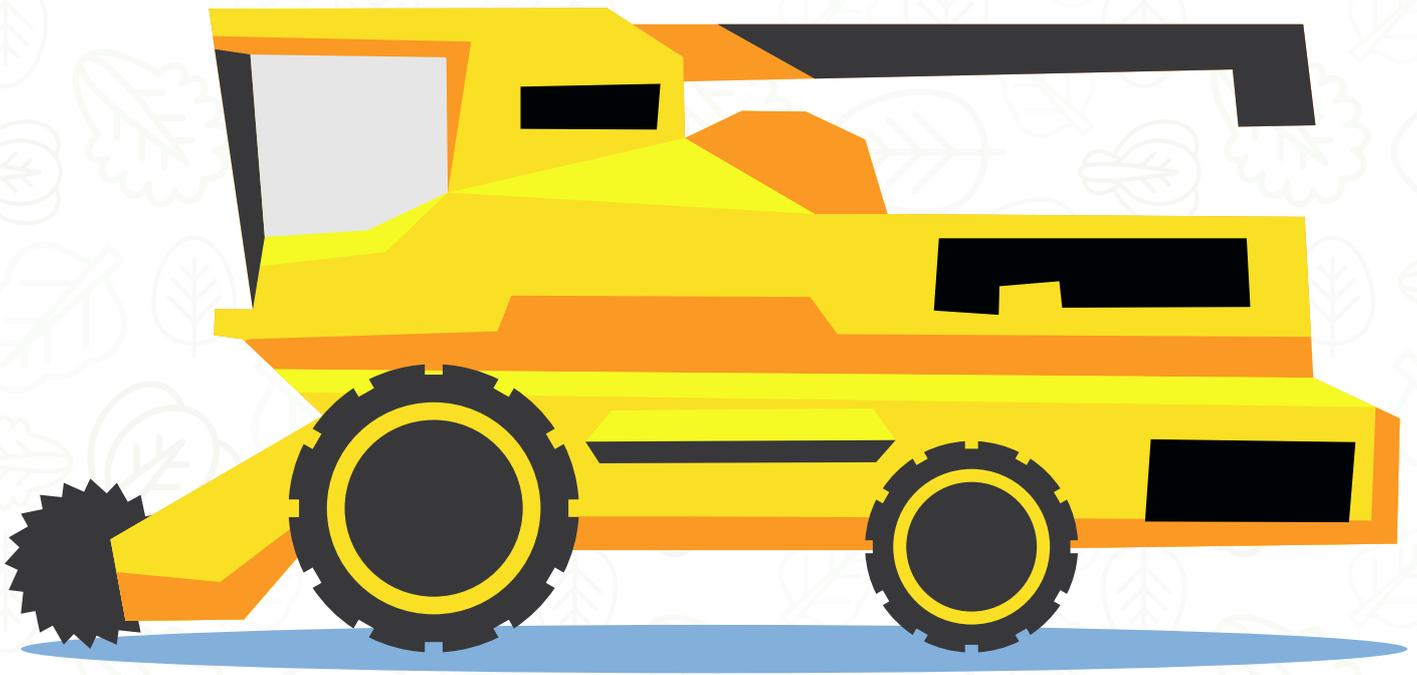
The **Seeder** on the tractor pops the seeds in the ground, all day long
(fingers wiggle like piano playing sing quietly as its baby plants)

The **Mower** on the tractor cuts the grass down, all day long
(horizontal hands whizzing like blades)

The **Baler** on the tractor makes great big bales, all day long
(stretch up make big circle with arms)

The **Bedder** on the tractor blows the straw in the shed, all day long
(clap your hands)

Try being a combine harvester, do each move separately until you get the hang of it, then combine. Why not see how fast you can go?



1. The **whole plant is drawn into the machine** by the header which goes round and round
(Roll your arms in front of you)
2. The **super sharp blades** mow the crop down
(Whizz horizontal hands back and forth)
3. Inside the tank **the seeds are knocked off the stalk**
(Pat your hands on your thighs)
4. Then **the straw is thrown out the back of the machine**
(Throw your arms in the air)

Now you have looked at how the food is produced, you can move onto how it tastes!

Ask the children to bring in some packaging from home - like cereal boxes.

Which cereals are used to make different children's breakfasts?

Can you think of any other foods that are made from cereals?

Why not have a go at making overnight breakfast pots with your class?

Overnight Breakfast Pots

This recipe is very flexible - as long as you have the oats and a liquid you can amend it to have all sorts of different ingredients. Stewed apple, grated carrot and cinnamon are some examples.

INGREDIENTS

Porridge oats, raisins (or other dried fruits), milk (or apple juice), honey

EQUIPMENT

Beakers (1 per child) to put ingredients into, spoons for measuring

HOW TO MAKE IT

1. Give each pupil a beaker.
2. Into the beaker measure 5 heaped dessert spoons of porridge oats, 1 dessert spoonful of dried fruit and a drizzle of honey
3. Then pour on the milk to come up just over the level of the dry ingredients
4. Sit the beaker in the fridge overnight and eat for breakfast the following morning

TIPS

Beware of allergies - particularly gluten allergies. Although oat gluten is different to wheat gluten, not all oats are gluten free so it's best to steer clear of using oats where there are gluten allergies.

Squeezy bottle honey is easier to use and you don't need to use spoons, which results in less honey being wasted.

To minimise waste, try and avoid using disposable cups.

If you are using fresh fruit or vegetables grate them to get small pieces that can absorb the liquid

HEALTH & SAFETY

Ensure hands are washed before preparing any food

Where the oats need to soak overnight, this should be done in the fridge and not just on the worktop. The overnight oats should not be left for longer than a day.

Food not eaten should be composted

There are some simple foods you can make and taste in the classroom.

Use **activity sheet 5 (cereal flashcards)** to match the farm produce to the final product.

You can then get the children to try the product by making either popcorn, toast or porridge.

We do grow sweetcorn in Scotland, but it is fed to livestock rather than being used for human consumption. Popcorn is made when the heat turns the yellow kernel inside out!

Wheat seeds have a line down the side of the seed - can you spot this? One of the seeds in the image is broken open - what colour is the seed inside?

Oat seeds are long and pointed. How are they different from the wheat seeds?

POPCORN

How to make it

Popcorn is a healthy snack (it's the added sugar or other coatings that add calories and can make it unhealthy). There are 2 ways to make popcorn - in a pan and in a popcorn maker. Although you can buy popcorn, it is easier to understand (and much more fun) if you make your own, from kernels.

Method 1 In a pan

If you are making it in a pan, you will need access to a hob and a non-stick pan with a tight fitting lid.

1. Add a splash of oil to the pan and bring up to temperature
2. Add a handful of kernels to the hot oil (what looks like a very small amount will expand quite a lot when it pops)
3. Put the lid on and keep the pan moving
4. In under a minute the kernels will start to pop. Keep the pan moving and turn the heat down.

5. Once the popping stops switch off the heat and let the popcorn cool for a few minutes before letting the children try it.

Method 2 In a Popcorn maker

If you don't have a popcorn maker, why not try the pan method first and if the children like the popcorn it might be worth buying a maker as they are quicker and cleaner to use.

1. Plug in the switch on the popcorn maker
2. Add a small handful of kernels
3. Put the lid and exit spout (if there is one) in place. If you do have an exit spout make sure there is a bowl in place to catch the popcorn as it comes out.
4. Switch on - popcorn made

NB popcorn makers are all different so please follow the manufacturer's instructions.

TOAST

How to make it

Toast is really simple to make and you could try different types of bread and do a simple graph based on raised hands, to see who liked which toast the best.

You could also look at bread from different parts of the world like pita bread and how the pita puffs up in the toaster, or naan breads flavoured with different ingredients, depending on the topic you are linking into.

PORRIDGE

How to make it

Making and trying porridge lets children see how the oats combine with the liquid to make the porridge. Porridge made with milk is generally more appealing to children than a water based porridge, but you could try both to see which is preferred in your class.

You can make porridge with a pan and hob or in a microwave depending on the facilities available in school, and should follow the packet instructions.

TEACHERS SHEET

Farmers raise animals for meat, eggs, milk and wool. Just like you and me, all the animals are different. The farmer puts a special tag in the animal's ears with a number on it. This helps with working out who is who. Looking after the animals is top priority to livestock farmers. This means they need to have:

Food - cows and sheep love to eat grass

Water - from a special box called a trough

Space - to move around with the other animals

Somewhere safe to live - this might be outside in a field or inside in a barn

Use **activity sheet 6 (animals on the farm)** to find out more about some of the different animals that live on the farm. Ask your group to make the noise of the animal and utilise online recordings of animal noises.

Farmers keep pigs for meat. Pork, bacon and ham are all pig products. Pigs also provide a huge range of other products like gelatine and leather. A male pig is a boar, a female pig a sow and baby pigs are piglets.

Sheep produce lamb and mutton. Sheep shearing happens annually and removing wool is important to keep the sheep cool. Wool does not generate the farmer income (often it costs more to remove the wool than the wool sale generates). A male sheep is a ram (or tup), a female sheep is a ewe and a baby sheep is a lamb.

Farmers keep hens for meat and eggs. Few farmers in Scotland keep large numbers of ducks (those that do often have a focus on the Christmas market). A male duck is a drake, a female is a duck and a baby duck is a duckling.

There are beef cows and dairy cows in Scotland. A male cow is a bull, a female is a cow and a baby is a calf. Beef cows are stocky with plenty muscle which produces high quality meat like steak. Tell the story of the beef cow, using **activity sheet 7 (beef story flash cards)**. You could give different children different cards and get them to tell you what they see and where they think the card comes in the sequence.



TEACHERS SHEET

In contrast, dairy cows have a different frame being taller and leaner than beef animals as they put more energy into producing milk rather than muscle.

Use **activity sheet 8 (label a cow)** to label up a dairy and a beef cow. Dairy cow milking, happens several times a day and the dairy cow needs to produce a calf before she can produce milk. Find out more about how dairy cows produce milk through this [interactive PowerPoint](#).

Use **activity sheet 9 (draw your own cow)** to look at the differences between beef and dairy cows and find out more about how they digest food.

Hens produce either eggs (layers) or meat (broilers). Laying hens can be caged, barn or free range. The code on the egg tells you the type of system the egg comes from.

Using the above information, together with **activity sheet 10 (match mother and baby)**, write up the name of the baby animal, and ask the children to link the mother to the baby.

To cut and paste the images, use **activity sheet 11**.

Once you have looked at the types of animals that live on farms, you can use **activity sheet 12 (where does food come from)** to match the animal to the food it provides.

Farmers keep hens to give us meat (chicken) and eggs. The farmer needs to look after his hens, by making sure they have food and water, as well as keeping them safe. Hens are omnivores and eat seeds, worms, grains and other insects. A happy healthy hen has a bright eye and her comb (the red bit on top of her head) should be a nice bright colour.

TEACHERS SHEET

Using the **activity sheet 13 (about hens)**, ask your class to work out where the different parts of the hen are. They can then have a go at colouring in their own hen.

To help you identify parts on the hen, here are some tips:

- The comb - on the top of the head, turns red around 18 weeks of age when the hen starts laying eggs.
- The wattles (under the chin) are usually red and together with the comb, the wattles cool the bird down when it is hot.
- Hens have a tongue, but no teeth.
- They are too heavy to fly very far or high and have short stumpy wings.
- Above the birds breast is its gizzard, filled with grit that grinds up the chicken's food before it goes into its tummy.
- Hens cannot see in the dark and have ears, which are the same colour as the eggs she lays. On the back of their legs is a spur - an extra toe that points backwards and cockerels have much bigger spurs than hens.
- Hens only have three toes and long nails, to scrape around for bugs and worms. The toes hold onto bars or branches, which is where hens sleep.
- Hens have very big, strong thighs. They help them run fast and keep their toes warm when they are sleeping.

TEACHERS SHEET

Have a go at singing the ["Spring Chicken song"](#).

This is a lovely action song that combines numbers and language.

*One mother hen sat on 4 little eggs,
(1 finger then 4 fingers raised)*

*Keeping them warm in her little egg
nest. (wiggling down giving yourself
a cuddle)*

*Then one day she heard a crack
(clap hands)*

*And a little voice said, as the egg
was hatched:*

CHORUS

*"I'm....a.....spring chicken! (jump
up and down)*

I'm yellow and small.

*My feathers are fluffy and
they're keeping me warm.
(wiggle on the spot)*

*My legs are not long, so I'll never
be tall, (stretch arms up)*

*But I'm a real spring chicken and
I'm having a ball!! (dance on the
spot)*

*Chicken, I'm a chicken, I'm havin' a
ball!!"*

*One mother hen sat on 3 little eggs,
(1 finger then 3 fingers raised)*

*Keeping them warm in her little egg
nest. (wiggling down giving yourself
a cuddle)*

*Then one day she fell asleep (Hands
rested on one side of face, eyes
shut)*

*And a little voice said in a
whispered tweet: (quiet singing)*

CHORUS

*One mother hen sat on 2 little eggs,
(1 finger then 2 fingers raised)*

*Keeping them warm in her little egg
nest. (wiggling down giving yourself
a cuddle)*

*Then one day she moved about
(turn a circle on the spot)*

*And a little voice said, as a chick
popped out: (clap hands)*

CHORUS

*One mother hen sat on 1 little egg,
(1 finger then 1 finger raised)*

*Keeping it warm in her little egg
nest. (wiggling down giving yourself
a cuddle)*

*Then one day she gave a sigh
(hands on either side of face)*

*And a little voice said: "SURPRISE!
SURPRISE!!" (shout !)*

TEACHERS SHEET

Using **activity sheet 14 (handprint chicken)** you can get arty and make your own handprint chickens which would make a nice wall display for the farming topic.

Once you have learnt about chickens and where eggs come from, a very simple activity is to show all the different ways that eggs can be cooked. You could also boil, scramble, poach or fry an egg. Use **activity sheet 15 (cooking with eggs)** which expand vocabulary.

Let's make scotch pancakes!

INGREDIENTS

200g self-raising flour
1 tablespoon sugar
1 egg
250ml milk
Oil

EQUIPMENT

Mixing bowl
Measuring jug
Tablespoon
Dessertspoon
Teaspoon
Frying pan
Fish slice
Plate

HOW TO MAKE IT

1. Add the flour to a mixing bowl
2. Break the egg into the mixing bowl on top of the flour, and add a little of the milk to make a smooth paste.
3. Add the rest of the milk slowly to the mixture, mixing as you go
4. Heat up a frying pan with a teaspoon of oil in it. When the pan is up to temperature, drop

a dessert spoon of the mixture into the hot pan. (The mixture is quite thick so it will spread a little in the pan but should not spread too much (if it does your mixture is too thin and you will need to add a bit more flour).

5. Cook for 2-3 minutes until bubbles show on the surface. Turn the pancake over and cook for 2 minutes on the other side. (The pancakes are ready when the surface turns golden brown).
6. Continue adding dessert spoonfuls of the mixture to the pan until all the mixture is cooked.

TIPS

Pancakes are best eaten straight away, however can be frozen or stored for 2-3 days in a sealed Tupperware box.

You can add fruit like sultanas or blueberries to the mixture before cooking.

Build your own burger

Burgers are easy to make and you could demonstrate how it's done and talk through the ingredients used. The children could then try the burgers you make.

HEALTH & SAFETY

When you are dealing with meat, please ensure your hands are washed thoroughly before and after, all surfaces and utensils are cleaned with hot soapy water and burgers are thoroughly cooked (no pink should remain) before tasting.

INGREDIENTS

250g minced beef, 1 egg, sea salt, freshly ground black pepper, rapeseed oil, breadcrumbs, pinch mixed herbs

EQUIPMENT

Bowl, jug, fork, frying pan, oven hob, grater (if using breadcrumbs)

HOW TO MAKE IT

1. Make your breadcrumbs by grating bread into a bowl
2. Add the herbs, minced beef, salt and pepper to the bowl with the breadcrumbs
3. Crack your egg into a jug and mix with a fork
4. Pour the egg into the meat and crumb mix
5. Use your hands to mix all the ingredients together
6. Once you have combined all ingredients divide the mixture into six equally sized balls. Flatten these with your hand to make them burger shaped.
7. Add a little oil to your frying pan, warm and add your burgers, cooking for 3-4 minutes on each side. Make sure they are cooked right through either by temperature probing or cutting open to make sure they are no longer pink in the middle.

Find Out More About RHET

The Royal Highland Education Trust (RHET) is a charity.

We aim to help children gain a better understanding of how their food is produced by taking them to visit local farms, and by providing in school learning opportunities.

You can find out more about us by visiting www.rhet.org.uk



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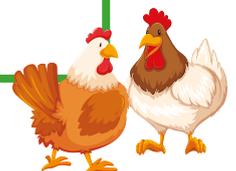
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I have explored and discovered where my food comes from

Certificate presented to:



Date:



Activity Sheets



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Hi, my name is Lily.

My **Explore & Discover Pack** will help you find out more about where food comes from.

There are farmers all across Scotland who work every day to look after plants and animals and produce some very tasty food for us to eat.

I hope you enjoy finding out more about what we do.



Cereals are plant seeds that we can eat.

The farmer plants the seeds in the ground and they grow to give us more seeds.



There are different seeds that farmers grow.

Can you match the cereal seeds to the food they give us.

Draw a line to match the cereal with the product.

wheat



barley



oilseed rape



oats



oil



bread



malt



porridge

We can use wheat to make flour.

We have to grind up the wheat seeds to make the flour. This flour can be used to make bread and biscuits to eat.

Can you number the pictures (start with number 1) to show how we make flour?



The baby wheat plants growing in the field



The big green wheat plants have lots of new seeds



The golden wheat plants are ready to harvest



Flour made from wheat seeds



Wheat seeds from the golden wheat plants



The combine cuts the golden wheat to collect the seeds

Let's make a paper pot and plant a seed.



1. You will need a glue stick, scissors, newspaper, compost, soil and seeds



2. Use the glue stick to measure where to cut the newspaper



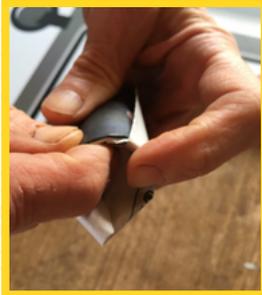
3. Hold the top of the glue stick and wrap the paper round



4. Roll the paper to the end



5. Use your finger to push the paper into the hollow end



6. Fold all the loose paper into the glue stick



7. Make sure the paper forms a solid bottom for the pot



8. Gently slide the pot off the glue stick



9. You have your paper pot!



10. Now get some compost



11. 3/4 fill the pot with compost



12. Choose one seed



13. Pop the seed in the pot



14. Now fill the pot to the top with soil



15. Remember to water your seeds regularly

Can you cut out and stick the picture onto the words that tell you what is happening?



The tractor pulls a **PLOUGH**, which turns over the soil



The farmer plants seeds in the soil. The **SEEDER** drops the small seeds into the soil.



The plant stems are straw. Straw is collected up and made into round lumps called **BALES**.



The farmer spreads animal poo called **SLURRY** on the ground. The slurry is plant food and will be ploughed into the soil to help the plants grow



Sweetcorn



Wheat





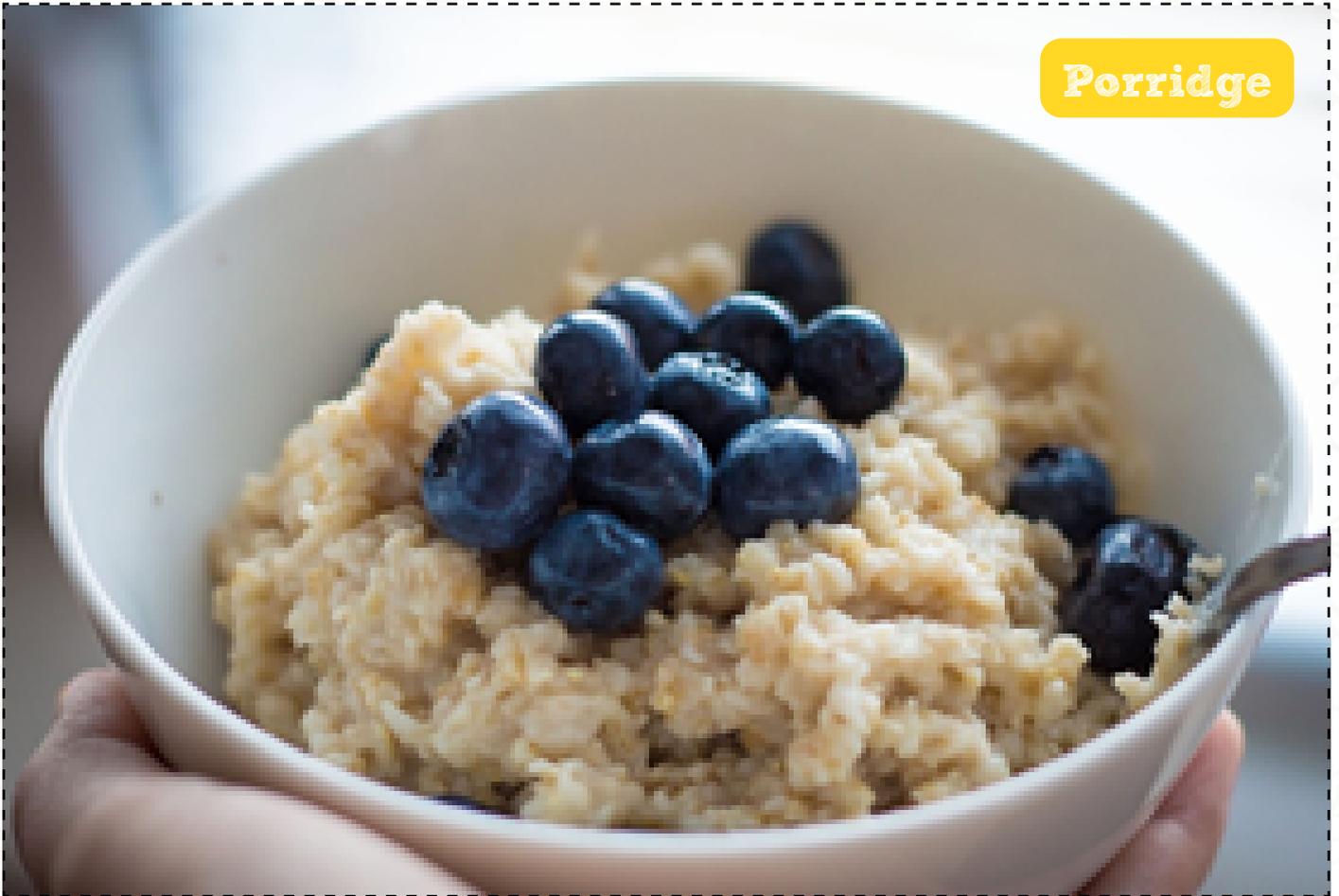
✂

Toast



Oats

Porridge



Find out more about some of the animals that live on the farm.



What am I?

What noise do I make?

What is a boy and girl called?



What are the babies called?

What do I give you?

What am I covered in?



What am I?

What noise do I make?

What is a boy and girl called?



What are the babies called?

What do I give you?

What am I covered in?

FARM ANIMALS

ACTIVITY 6 Animals on the Farm



What am I?

What noise do I make?

What is a boy and girl called?



What are the babies called?

What do I give you?

What am I covered in?



What am I?

What noise do I make?

What is a boy and girl called?



What are the babies called?

What do I give you?

What am I covered in?



What am I?

What noise do I make?

What is a boy and girl called?



What are the babies called?

What do I give you?

What am I covered in?

Grass



Bull in Field





Cows in Straw Barn



Cow with Calf



Burger



FARM ANIMALS

ACTIVITY 8 Label A Cow

Look at each of these cows.

Draw a line to the following on both cows:

Nose

Ear tag

Udder

Hoof

Tail

Leg

Calf





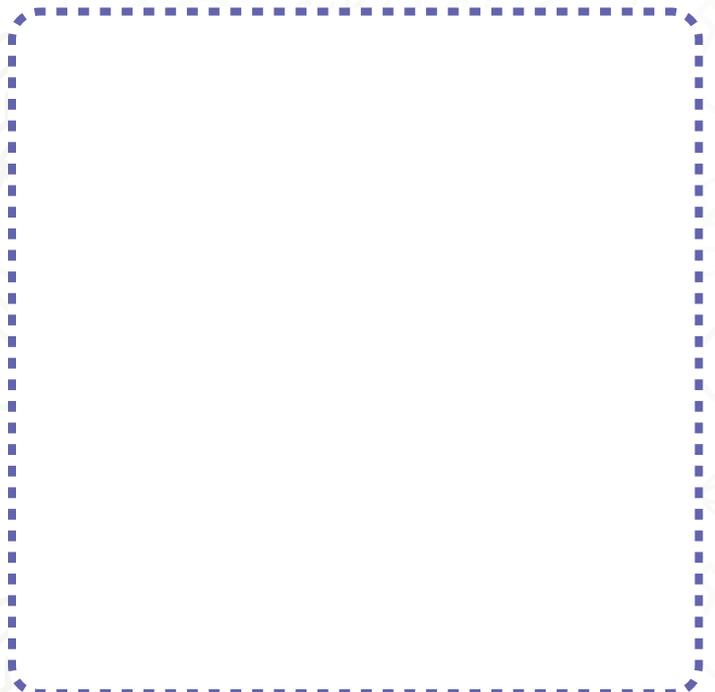
The **beef cows** the farmer keeps for giving us meat, can be all sorts of different colours - black, brown, tan, ginger and white.

The **dairy cows** the farmer keeps for giving us milk are usually black and white.

Can you draw a picture of a happy cow?



Where do you think it would live? What would it have to eat? What colour would your cow be? Don't forget to add your cow ear tag and number.



FARM ANIMALS

ACTIVITY 10 Match Mother & Baby

Do you know what young farm animals are called?

Can you draw a line from the mum to the baby?



Cow



Chick



Sheep



Foal



Hen



Lamb



Pig



Calf

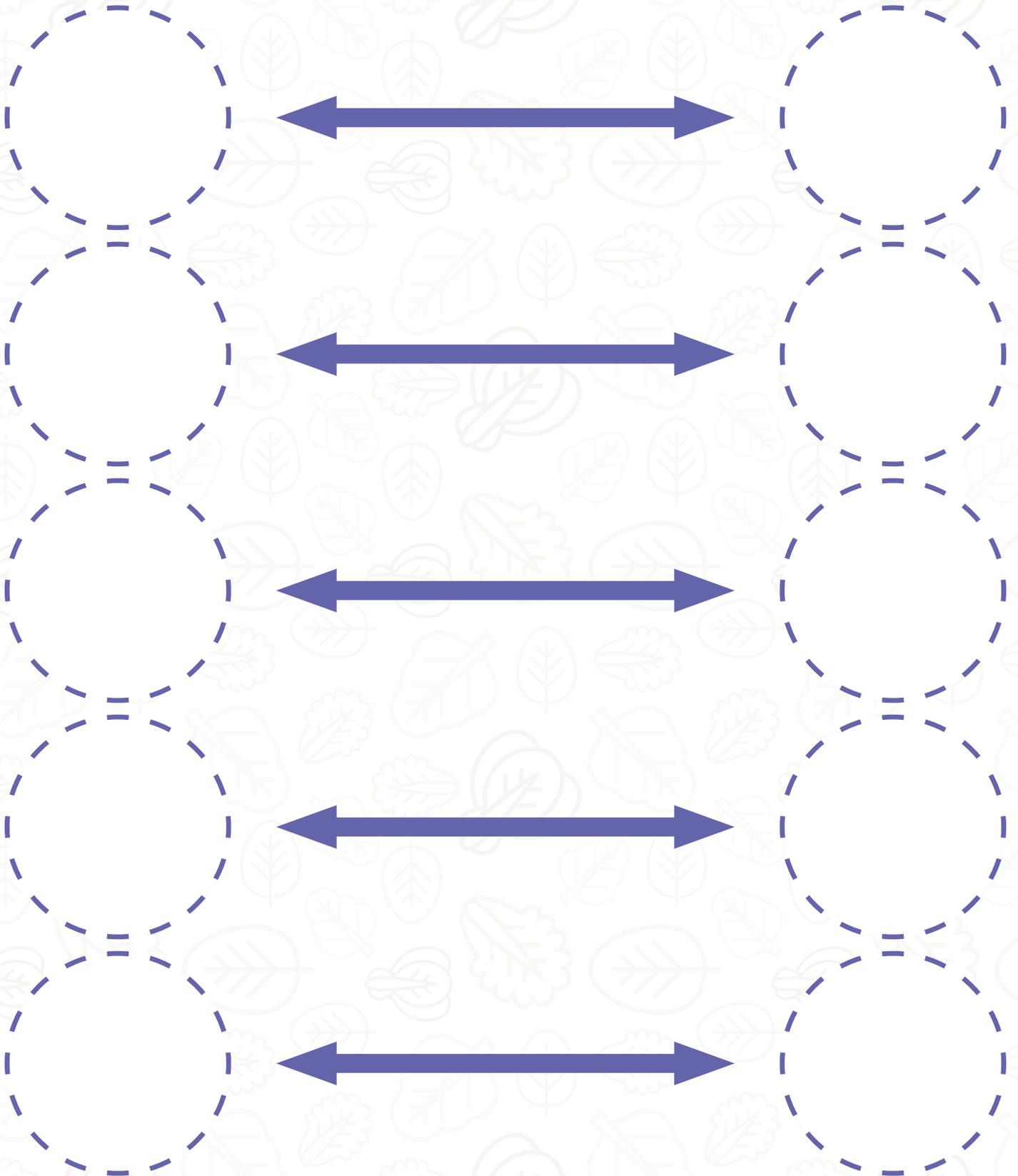


Horse



Piglet

This blank sheet is provided if you want to use it to cut and stick the mother and baby images from above into the correct boxes.



FARM ANIMALS

ACTIVITY 12 Where Does Food Come From?

Some animals give us more than one food.

Draw a line from the animal to the product.



Milk



Eggs



**Chicken
nugget**



Pork



Lamb



**Beef
burger**



**Beef
cow**



Chicken



Pig



**Dairy
cow**



Sheep

Can you colour in and identify the parts of a hen?



Comb

Eyes

Wattles

Ear

Beak

Spur

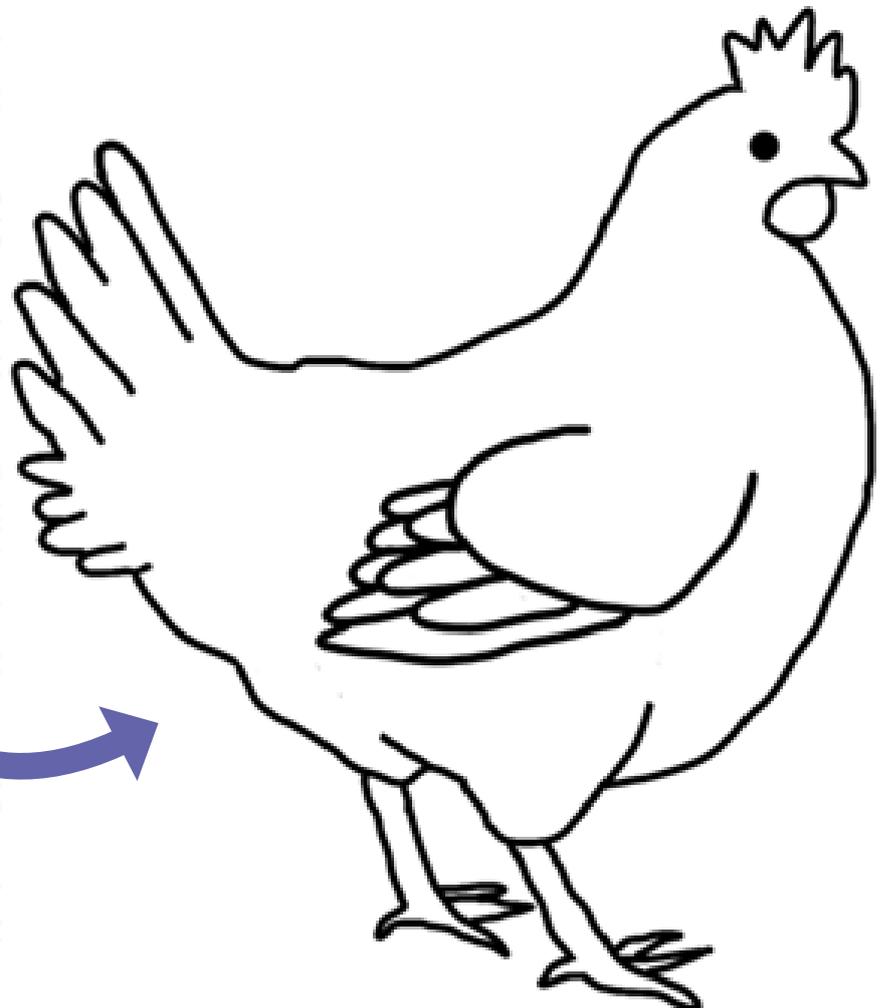
Wing

Toes

Breast

Thigh

Colour me in!



FARM ANIMALS

ACTIVITY 14 Hand Chicken

What you will need:

- > paper plate
 - > paint
 - > pens
 - > paper
- If you don't want to use paint, you can also just use a pen/pencil and draw around your hand



Put your paint on the paper plate, and move one hand around on the paint to cover your palm



Place your paint-covered palm onto a blank piece of paper to make the main shape. To make a chick use your forefinger only.



Lift your hand straight up from paper. If you are making more than one, repeat last two stages.



Use your fingers to fill in any gaps. Once dry, use a pen to add a beak, comb, eyes legs and wings.



Try using different colours of paint to create colourful designs. Have fun!

Draw a line from the words to the cooked egg!

A boiled egg is cooked,
in its shell, in hot water

A scrambled egg is mixed with
milk and cooked in a hot pan

A poached egg, is taken out of its
shell, and cooked in hot water

A fried egg, is taken out of its shell,
and cooked in a hot frying pan





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