

# Agri Aware's Dig in!

## MODULE 2



An Roinn Talmhaíochta,  
Bia agus Mara  
Department of Agriculture,  
Food and the Marine



Learning about life on the farm and in the countryside



# Teacher guidelines

## How to use this pack

*Dig In! Learning about life on the farm and in the countryside* is linked to the primary school curriculum or strands of it. It is divided into four modules. The modules are divided according to levels of ability.

**Module 1** corresponds with the Junior and Senior Infants Curriculum

**Module 2** corresponds with the First and Second Class Curriculum

**Module 3** corresponds with the Third and Fourth Class Curriculum

**Module 4** corresponds with the Fifth and Sixth Class Curriculum

The modules have been named Modules 1-4 in order to cater for students with **special needs, learning difficulties** and **foreign language students**. Should a teacher feel that a module is too advanced/basic for a particular class, a lower/higher module should be used.

Each module contains **twenty lesson plans**, each dealing with a different aspect of farming, the countryside, farm and electrical safety and the environment. The lesson plans are:

The Irish farmer	Poultry	Electrical safety	Soil
Healthy eating	Cereals and grasses	Farm animal safety	CAP
Cattle	Fruit and vegetables	The hedgerow	Sustainability
Sheep	Farm and countryside safety	Air and trees	Food security
Pigs	Machinery safety	Water	Agriculture in Africa

Each lesson plan is linked to strands of the **Science, Geography and SPHE curricula**. The suggested activities sections at the end of each lesson also allow for aspects of English, Maths, Art and Drama to be incorporated into the lesson.

For **Gaelscoileanna** or those wishing to teach the lesson through Irish, activity sheets *as Gaeilge* are available to download from [www.agriaware.ie](http://www.agriaware.ie). All lessons and activity sheets in English can also be downloaded from [www.agriaware.ie](http://www.agriaware.ie)



Teachers, sign your class up to participate in the Farm Safe Schools programme! You can find out more information about this programme and how to register here: [www.farmsafeschools.ie](http://www.farmsafeschools.ie)

## About Agri Aware

**Agri Aware** is Ireland's independent agri-food educational body. The mission statement of Agri Aware is 'To create a national awareness of the value of modern agriculture and farming, the stewardship of the rural environment, animal welfare and the benefits of nutritious Irish food'. Agri Aware delivers educational programmes for students at primary, second and third level and for the general public.

### Irish agriculture – The story of farming and food production in Ireland

On an Irish farm, you will find many different types of animals, including cattle, sheep, pigs, poultry and goats. All of these farm animals are cared for by the farmer. The farmer also looks after the beautiful green landscape and our rivers, ensuring that they are kept clean and safe, for both people and animals to enjoy. The food we enjoy each day for our breakfast, lunch and dinner comes from farms across Ireland. Our meat, milk, eggs, butter, bread and cheese all started life on the farm.

Almost all food produced on Irish farms is sent to shops and markets to be sold.

**Beef** is the name given to the meat that we get from cattle, for example roast beef, steak and minced beef. Irish beef is famous all over the world for being of very high quality.

**Milk** traditionally comes from cows and is used to make butter, cheese and yogurt. However, goats and sheep milk can also be used to make cheese.

**Grain** is grown in fields and is used to produce bread and breakfast cereals.

**Eggs** we usually eat are laid by hens and ducks and are used for baking. They are also enjoyed during meal times.

**Fruit** grown on the farm is enjoyed during various meals and is also used to make jams and fruit juices.

**Vegetables** are enjoyed as snacks or eaten with our dinner and they are also used in sauces.

### A very busy job

Farming life is go-go-go! A farmer has lots of important work to do each day, such as caring for the animals, ensuring that they are healthy and happy and have lots of food, water and shelter. In winter, when it gets colder, animals are housed in sheds. Farmers harvest grass and crops during the year to feed the animals during the winter.

Along with caring for their animals and looking after their crops, farmers also have a responsibility to care for and protect the Irish landscape. They act as caretakers of the countryside, working to keep our environment safe, clean and green and to conserve the natural habitats that exist in Irish fields, hedgerows and rivers.

Farms in Ireland are very important to the community as food produced on the farm goes to the shops and markets for local people to buy. Bigger farms provide jobs for people living in the local community as there is often too much work for one farmer to do. Visitors to a farm include vets who check on the animals and delivery people who transport the fruit, vegetables and milk from the farm to factories and supermarkets.

### How do farmers know what to do each day on the farm?

The main role of the farmer is to care for the animals and to produce quality food. To do so, he/she must draw on a wide range of knowledge and skills, for example using science, machinery and technology. Rules and guidelines set out by the Department of Agriculture help Irish farmers with this work, in order to produce quality, traceable and safe food to very high standards for people in Ireland and from across the world to enjoy each day.

All farmers in Ireland follow a 'Code of good farming practice' which makes sure that farmers do their work the right way. This helps the farmer to follow the rules about how best to protect rivers and waterways, archaeological sites and wildlife habitats.

The Department of Agriculture, Food and the Marine inspects farms in Ireland to make sure that they are kept clean, that fences and walls are securely in place and that any chemicals or medicines used on the farm are handled with care.

Traceability of food is very important for the people that buy it. In Ireland, all sheep, cattle and pigs must wear a special tag in their ears. This tag acts like a passport for the animal, allowing the movement of animals from farm to farm to be monitored. It is important to know how and when meat moves from one place to another, especially when it is being exported to lots of countries across the world.

### Farm = Food! What would we do without it?

Some 40% of all the land on earth is farming land. There are approximately 7 billion people in the world today, and this is expected to grow to 9.8 billion people by 2050. As a result, food security is more important than ever and farmers have a really important role to play in feeding a growing population, whilst also caring for the land, animals, rivers and wildlife.

Ireland has long been a very important producer of world food with 81% of Irish land used for agriculture. The Irish countryside is green due to the high level of rainfall and mild temperatures experienced in Ireland. This makes Ireland a perfect place for growing green grass, which is very healthy for the animals to eat. Food produced from the animals that eat this healthy green grass is also very healthy for us.

### Farming thousands of years ago and now – What has changed?

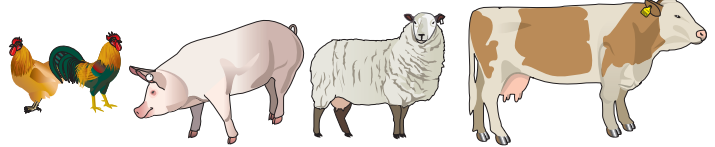
Farming methods were very different in Ireland many years ago when compared with farming today. Years ago, farmers only needed enough food for their own families and because of this they had a small number of animals and a few different crops growing on a small patch of land. It was also a time when much work was done by hand as there were no machines. This meant that farming was physically very hard work and required many hours and lots of people to complete tasks that are now considered quick and simple.

Much of the work previously done by hand has now been modernised to make life easier for farmers. Cows are now milked in a milking parlour with an electronic milking machine, while vehicles like tractors and other machinery remove the need for so much hard physical work by the farmer, which can be especially difficult as he/she gets older.

Education plays a key role in farming today as many farmers have learned about farming through school and third level education. All these changes mean that a farmer's purpose is no longer just to feed their own family; they now produce food for people across the world in a sustainable way, to meet today's needs without compromising those of tomorrow.

The long tradition of farming in Ireland means our animal population is much larger than our human population. There are 4.9 million people in Ireland but many more farm animals! As a result, we produce much more food than we need for our home population, particularly foods such as meat and dairy produce.

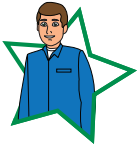
In Ireland there are: 6.5 million cattle (beef and dairy), 1.6 million pigs, 3.9 million sheep and 106 million poultry (chickens, roosters, ducks, geese and turkeys).



### Food for thought:

- Farming plays a key role in Irish life
- The farmer is a **primary producer** i.e. the first link in the 'farm to fork' pathway of food
- There are **137,500** family fun farms, with the average farm size at **43 hectares** (ha) in Ireland
- In Ireland, 4.9 million ha of land is devoted to agriculture and food production
- Beef and dairy farms are the two largest sectors in Irish agriculture at present
- 1 in every 8 jobs in Ireland is farming related
- Farms in the south and east of Ireland are typically lowland, with rich fertile soil suitable for dairy or tillage farming
- Farms in the north and west of Ireland are less fertile, more rugged hilly grounds, which are more suitable for sheep and beef cattle
- Irish dairy farmers produce enough milk and dairy product each year to feed 52 million people in the world
- In 2019 agri-food exports were estimated to be a worth of **€14.5 billion**

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## The Irish farmer

### Curriculum Links:

- **Science** Living things  
Environmental awareness and care
- **Geography** Human environments
- **SPHE** Myself and the wider world

### Lesson objectives:

To revise material covered in Module 1. To discuss the fact that nearly all foods originates from the farm. To make students aware of the many different jobs that farmers must do.

### Teacher guidelines

It is suggested that teachers ensure that students are familiar with the vocabulary and concepts introduced in the previous module before starting this lesson.

### Keywords and concepts introduced in Module 1:

farmer food fields sheds tractors wellies

A farm is a place where animals like cattle, sheep, pigs and chickens live, and plants like fruit, vegetables and cereals are grown. Farmers work on farms where they care for the animals and grow the crops

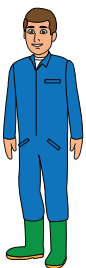
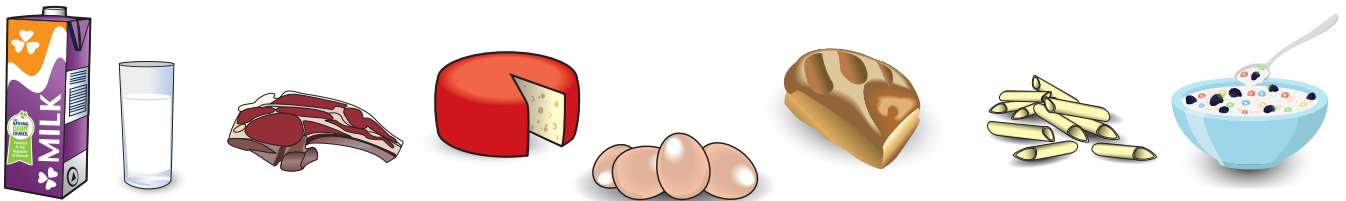
After revision of the above, teachers could discuss the more detailed information below.

### Keywords for this lesson:

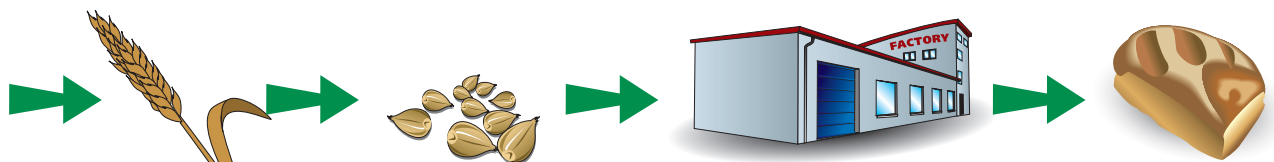
factories packaged fences vet crops

### Where does our food come from?

Without farming, we would have little food. Nearly all food, including fruit and vegetables, come from the farm. Meat, milk, cheese and eggs come from the animals and cereals grown on the farm are used to make the bread, pasta and breakfast cereal that we eat each day for breakfast, lunch and dinner.



Nearly all foods that we eat is grown on the farm and this is then sent to shops to be sold. Some food is firstly sent to **factories** where it is **packaged** or made into other foods e.g. grain is made into bread.



## What does the farmer do?

Farming is a very busy job. The farmer has a lot of different things to do each day. Caring for the animals takes up a lot of time. The farmer must make sure that all the animals are safe in the fields and sheds where they live. They must put fences up around all of the fields to make sure no animals can get in or out. **Fences** also help to keep visitors to the farm safe.

The farmer must make sure that the animals always have enough food and water. When an animal is sick, the farmer must call the **vet**. A vet is a doctor for animals.

Along with caring for animals, the land and beautiful Irish countryside, farmers also have to grow **crops**, like fruit, vegetables and cereals (see Cereals and grasses page 14). To grow crops, the farmer needs to prepare the soil, plant the seeds, water and fertilise the crops.

**Remember: Stay safe on the farm – Always ask the farmer first!**



### Suggested activities:

- Photocopy the activity sheet on page 41
- Conduct a lunchbox survey in class. Ask the students to trace the foods back to the farm e.g. bread is made from grain grown on the farm etc
- Investigate the many jobs a farmer does each day. Compile an illustrated poster
- Interview a farmer. Compile an illustrated poster with the many different jobs that the farmer must do in a day. Include feeding animals, fencing, planting seeds, calling the vet etc.
- Discuss the fact that people, animals and plants depend on one another and that we rely on farming for food
- For extension material, see Modules 3 and 4

### Learning outcomes:

At the end of this lesson, students should be aware that nearly all foods originate from the farm. They should also be aware of the many different jobs that farmers must do.

### Additional resources:

- [www.agriaware.ie](http://www.agriaware.ie)



## Healthy eating

### Curriculum Links:

- **Science** Living things  
Environmental awareness and care
- **Geography** Human environments
- **SPHE** Myself and the wider world

### Lesson objectives:

To revise material covered in Module 1. To make students aware that nearly all food comes from the farm and that we should choose healthy foods and snacks.

### Teacher guidelines

It is suggested that teachers ensure that students are familiar with the vocabulary and concepts introduced in the previous module before starting this lesson.

### Keywords and concepts introduced in Module 1:

**energy meals healthy fruit vegetables milk**

Everything needs energy to move and work e.g. cars need petrol, televisions need electricity. Food gives us the energy to think, move, walk and talk. A healthy food is something, which is good for us and helps our bodies to grow properly.

### Remember: Clean hands, clean kitchen, clean food!

After revision of the above, teachers could discuss the more detailed information below.

### Keywords for this lesson:

**variety sugar salt oil snacks unsweetened**

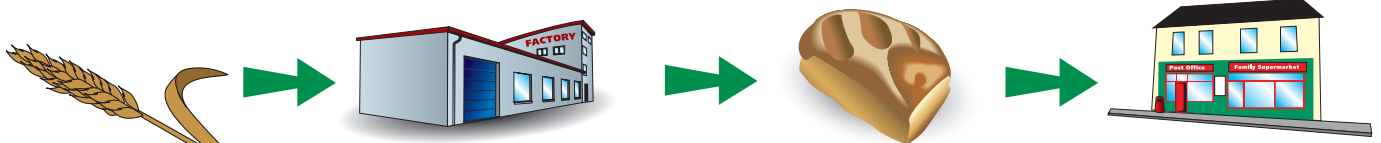
### Healthy eating

All living things need energy to grow and live. We get our energy from food. To have energy and be healthy, it is important that we eat a **variety** of different foods. It is also important that we exercise regularly.

Different foods are good for different parts of our bodies. For example, milk and cheese help our teeth and bones to grow and we should have three portions of food made from milk each day. Fruit and vegetables are good for our hair, skin and eyes and we should eat at least five portions of fruit and vegetables each day.

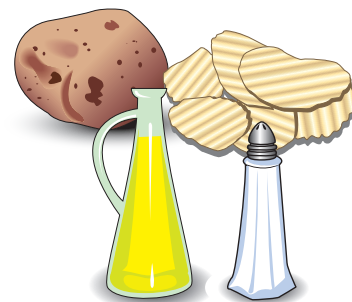
### Where does our food come from?

Nearly all foods are grown on the farm and they are then sent to shops to be sold. Some are firstly sent to factories where they are packaged or made into other foods e.g. wheat is made into bread.





Thousands of different foods are made using the fruit, vegetables, meat, milk and eggs that come from the farm. Some of these are very healthy for us, but the foods that have too much **sugar, salt, oil** or other ingredients added to them can be very unhealthy if we eat them too often. The healthiest foods for our bodies are foods that are the most natural e.g. fruit, vegetables, milk, brown bread and meat.



## Snacks

To have the energy to think, move, walk and talk we must all eat regular meals. Most people have breakfast in the morning, lunch in the middle of the day and dinner in the evening. Often, if we are hungry we will have a **snack** between meals.

It is important to choose healthy snacks such as, fruits, vegetables, yogurt and cheese. For example, it is better to choose fruit as a snack instead of crisps. Crisps contain a lot of salt and are fried in oil. Eating too much salt and oil is not healthy for our bodies.

It is healthier to drink milk, water or **unsweetened** juice rather than fizzy drinks!. Fizzy drinks have lots of sugar that can damage our teeth. It is important to have a balanced diet and not to eat sugary or salty foods very often.

### Suggested activities:

- Photocopy the activity sheet on page 42
- Create and send out a school survey to find out how healthy the school is as whole. Discuss the results and what your school could do to improve their diet
- As part of Agri Aware's Incredible Edibles Healthy Eating programme Task 5, bring a selection of fruit and vegetables to the classroom. Peel and cut them up so that the students can touch, smell and taste the various items. Draw the many different types of fruit and vegetables that come from Irish farms
- Create a healthy eating chart using the Food Pyramid as a guide. Collect empty packets of different foods and stitch them to your wall chart under the different categories found on the pyramid, highlighting the portion sizes and frequency of each
- Discuss the foods that can be eaten straight from the farm. Compare them to those that have other ingredients added to them (i.e. processed foods)
- Students can create pictures of healthy snacks such as unsweetened fruit juices, milk, cheese, unsalted nuts, fruit etc. These can be displayed with the title "Choosing a healthy snack!"
- As a homework assignment and to encourage parental support, students can create a list of healthy foods found in the kitchen at home
- Discuss the fact that people, animals and plants depend on one another and that we rely on farming for food (See 'The Irish farmer' page 2)
- For extension material, see Modules 3 and 4

### Learning outcomes:

At the end of this lesson, students should know the importance of choosing healthy foods and snacks and that they should only eat high sugar and salt snacks occasionally.

### Additional resources:

- [www.agriaware.ie](http://www.agriaware.ie)
- [www.incredibleedibles.ie](http://www.incredibleedibles.ie)

Developed in consultation with Bord Bia and the Origin Green Sustainability Programme.

**BORD BIA**  
IRISH FOOD BOARD





## Cattle

### Curriculum Links:

- **Science** Living things  
Environmental awareness and care
- **Geography** Human environments
- **SPHE** Myself and the wider world

### Lesson objectives:

To revise material covered in Module 1. To discuss what cattle look like and how they behave. To develop awareness of the many foods, products and resources that we get from cattle.

### Teacher guidelines

Teachers should ensure that students are familiar with the vocabulary and concepts introduced in the previous module before starting this lesson.

### Keywords and concepts introduced in Module 1:

**cattle cow bull calf low herd grass hay meat milk**

Cattle eat grass and usually live outside in fields. During the winter, they live in sheds and the farmer gives them food like hay to eat. We get meat and milk from cattle. We use milk to make cream, butter yoghurt and cheese.

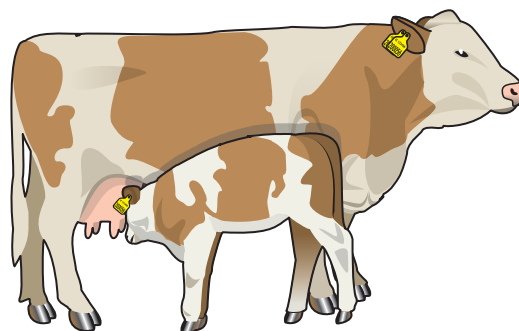
After revision of the above, teachers could discuss the more detailed information below.

### Keywords for this lesson:

**hooves horns grazing beef cream butter cheese leather**

### What do cattle look like?

Cattle have four legs and a tail. Their feet are called **hooves**. Most cattle have **horns**, but because these can be dangerous, they are removed when the calf is young. Like humans, all cattle do not look the same. They can be lots of different colours and sizes. The majority of black and white cows that we see in Ireland are called Freisians and they are used to produce milk.



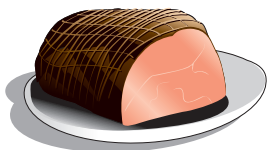
### In the field

Cattle are usually kept outside in fields. They spend a lot of time **grazing** (eating grass). They often lick themselves or each other to get clean and to get rid of any insects that might be crawling on their skin. They use their tails to flick away insects.

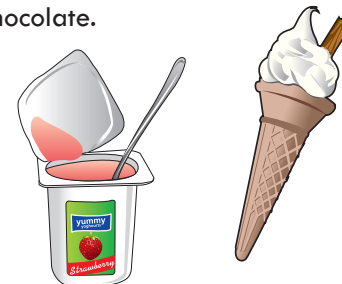
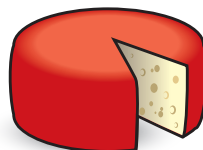


## What do we get from cattle?

The meat that we get from cattle is called **beef**. We can cook beef in many different ways, for example roast beef, steak and minced beef.



We get milk from dairy cows. Milk is not just a healthy drink (see Healthy Eating, page 5), milk can be used to make many different things like **cream, butter, cheese, yoghurt, ice cream** and chocolate.



**Leather** (or animal hide) also comes from cattle skin and it is used to make jackets, shoes, belts, gloves, rugs and furniture coverings.

### Suggested activities:

- Photocopy the activity sheet on page 43
- Discuss what cattle look like. Encourage students to use the correct vocabulary. Ask students to draw labelled pictures that will clearly show the ears, eyes, mouth, hooves and tail of the cow
- Sponge painting can be used to make cow print patterns. Compare this with other animal patterns that are found in nature. Discuss the fact that not all cows are black and white
- Compile a list of all the products we get from cattle under the headings 'Food' and 'Leather'. Ask pupils to list different cuts of meat they get from cattle
- Conduct a class survey to find the most popular product made from milk. Students should record all of the products made from milk that they eat in a day. Draw a chart showing the results
- Discuss the fact that people, animals and plants depend on one another and that we rely on farming for food (See 'The Irish farmer', page 2)
- During computer time, investigate the life and work in the day of a farmer. For example, find out how often they must milk cows and how often the milk is collected from the farm etc.
- For extension material, see Modules 3 and 4

### Learning outcomes:

At the end of this lesson, students should be able to describe what cattle look like and be aware of the products and resources they give us e.g. milk, meat and leather.

### Additional Resources:

- [www.agriaware.ie](http://www.agriaware.ie)



## Sheep

### Curriculum Links:

- **Science** Living things  
Environmental awareness and care
- **Geography** Human environments
- **SPHE** Myself and the wider world

### Lesson objectives:

To revise material covered in Module 1. To discuss sheep and their products.  
To introduce the students to the concept of caring for animals.

### Teacher guidelines

It is suggested that teachers ensure that students are familiar with the vocabulary and concepts introduced in the previous module before starting this lesson.

### Keywords and concepts introduced in Module 1:

ewe ram lamb bleat flock wool meat milk

Sheep live in fields in large groups called flocks. They eat grass and provide us with wool, meat and milk for making cheese.

After revision of the above, teachers could discuss the more detailed information below.

### Keywords for this lesson:

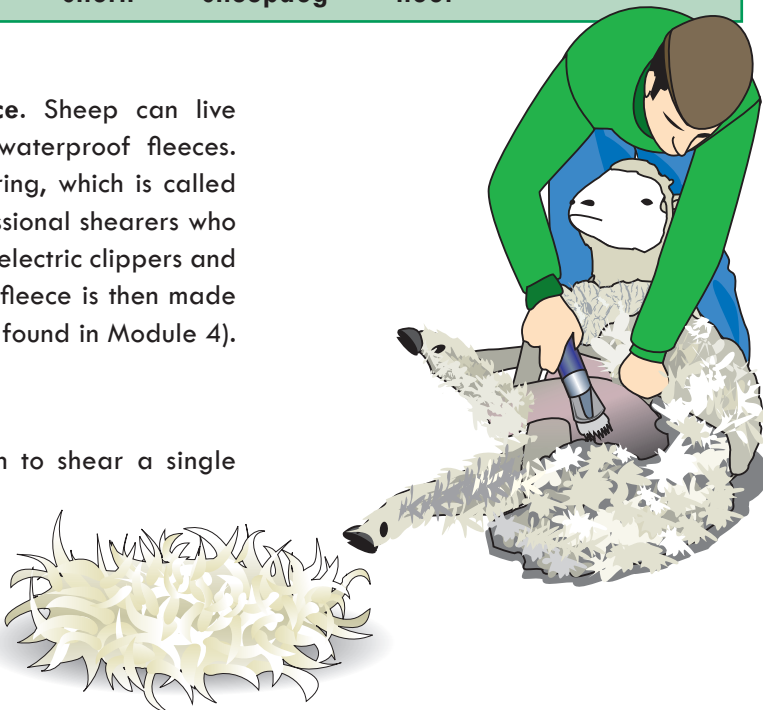
fleece shearing shorn sheepdog hoof

### Shearing

Sheep have a woolly coat called a **fleece**. Sheep can live outdoors all year round with their warm, waterproof fleeces. This fleece is cut off once a year in late spring, which is called **shearing**. Sheep are usually **shorn** by professional shearers who travel from farm to farm. The shearer uses an electric clippers and can shear just over one sheep a minute. This fleece is then made into wool (further information on wool can be found in Module 4).

### Fun fact about shearing:

The world record for the fastest time taken to shear a single sheep is 37.9 seconds!

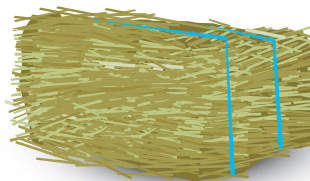
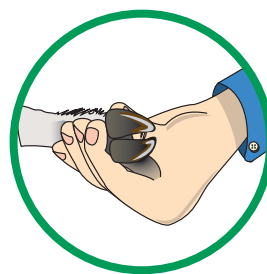


## Caring for sheep

The farmer uses a **sheepdog** to move the sheep from one field to another when they need more grass.

The farmer often has to trim the sheep's feet. A sheep's foot is called a **hoof**, and has two toes. Hooves wear down naturally when sheep walk on hard ground. When sheep spend most of their lives in fields or on soft ground, they must have their hooves trimmed.

Grass grows best in good weather. This means that sheep have plenty to eat in the summertime. However, to make sure that the sheep have enough to eat in wintertime, the farmer must give them extra food like hay and silage to eat.



### Suggested activities:

- Photocopy the activity sheet on page 44
- Discuss sheep and explore what different sheep breeds look like. Encourage students to use correct vocabulary. Ask students to draw labelled pictures that will clearly show the ears, eyes, mouth, hooves and tail of the cow. If possible, get students to label the different cuts of meat we get from sheep
- Creative writing: Make a list of new words, introduced in this module and create a story using the content learned in this lesson plan. For example, A day in the life of a sheepdog / The day the sheep lost her coat
- Seasons: create a timeline that focuses on the changes that take place for sheep, for example, Spring time and lambing, Summer and shearing etc.
- Discuss the fact that people, animals and plants depend on one another and that we rely on farming for food (See 'The Irish Farmer' page 2)
- Investigate the work of a sheep farmer. Compare the fleece removed from the sheep with a ball of yarn/wool. Compare this to a finished woollen product such as a jumper or scarf.
- For extension material, see Modules 3 and 4

### Learning outcomes:

At the end of this lesson, students should know the basic key words relating to sheep and have a greater understanding of the process of shearing and caring for sheep.

### Additional resources:

- [www.agriaware.ie](http://www.agriaware.ie)



## Pigs

### Curriculum Links:

- **Science** Living things  
Environmental awareness and care
- **Geography** Human environments
- **SPHE** Myself and the wider world

### Lesson objectives:

To revise material covered in Module 1. To name some of the body parts of the pigs and discover what they eat and how they live.

### Teacher guidelines

It is suggested that teachers ensure students are familiar with the vocabulary and concepts introduced in the previous module before starting this lesson.

### Keywords and concepts introduced in Module 1:

sow boar piglet litter grunt shed meat ham rashers sausages

Pigs provide us with meat like ham, rashers and sausages. A female pig is called a sow. A male pig is called a boar. A young pig is called a piglet. Pigs are kept in sheds.

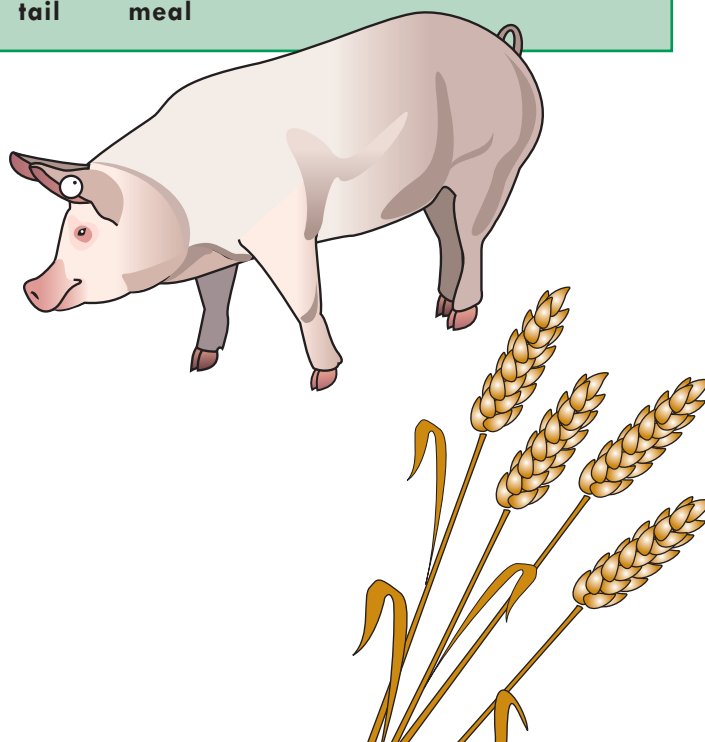
After revision of the above, teachers could discuss the more detailed information below.

### Keywords for this lesson:

snout crubeen tail meal

### What do pigs look like?

Many breeds of pig have pink skin, but they can also have skin with different colours. They have a nose called a **snout**, which they use for rooting in the ground for food. Pigs' feet are often called trotters or **crubeens**. The word crubeen comes from the Irish word crúibín, meaning "little hoof". Crubeens have four toes, two on the ground like a hoof and two on the back of the ankle. Pigs have a short, curly **tail**.



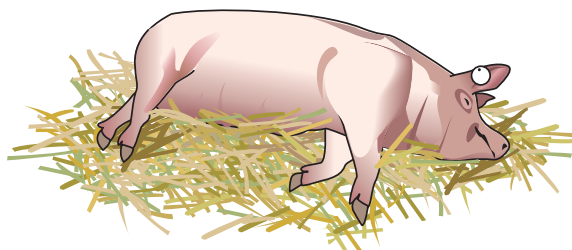
### What do they eat?

Pigs are omnivores, their diet usually comprises of **meal** made from cereals (further information on cereals can be found on page 14).

## Did you know pigs are very clever animals?

Pigs are not dirty animals like some people think.

Pigs are very clever, they are able to learn more quickly than horses or dogs and can be easily trained. They keep their beds very clean and go to the toilet (in a dark corner) away from where they sleep. Pigs who are kept outside may roll in the mud during the summer to keep themselves cool. Pigs can get sunburnt and the mud protects them from the sun.



### Suggested activities:

- Photocopy the activity sheet on page 45
- Discuss pigs and explore what different pig breeds look like. Encourage students to use correct vocabulary. Ask students to draw labelled pictures that will clearly show the ears, eyes, mouth, hooves and tail of the pig. If possible, get students to label the different cuts of meat we get from pigs
- Watch the film 'Babe' with the students and discuss the fact that Babe the pig was so easily trained
- Students could draw an illustrated list of products that we get from pigs
- Students could draw and label the members of the pig family i.e. boar, sow, piglet, litter
- As part of circle time, examine pictures/photographs of pigs. During circle time, ask students to think about pigs, how they act and what they do. With support, students could write and solve riddles for all the farm animals. For example "I have four legs. I feed my babies milk. I have a short curly tail. Who am I?"
- Discuss the fact that people, animals and plants depend on one another and that we rely on farming for food (see 'The Irish farmer' page 2)
- Create a Venn diagram and label as 'common', 'uncommon' and 'similar'. Examine pictures/photos of pigs. Compare them to other farm animals under the headings of colour, size, where they live and what food they provide us with
- Visit a farm or book an Agri Aware Mobile Farm visit to your school
- For extension material, see Modules 3 and 4

### Learning outcomes:

At the end of this lesson, students should know and understand the words relating to the body parts of pigs, know what pigs eat and how they live.

### Additional resources:

- [www.agriaware.ie](http://www.agriaware.ie)



## Poultry

### Curriculum Links:

- **Science** Living things  
Environmental awareness and care
- **Geography** Human environments
- **SPHE** Myself and the wider world

### Lesson objectives:

To revise material covered in Module 1. To broaden awareness of poultry by introducing students to the turkey, duck and goose. To compare and contrast the different types of poultry birds.

### Teacher guidelines

It is suggested that teachers ensure that students are familiar with the vocabulary and concepts introduced in the previous Module before starting this lesson.

### Keywords and concepts introduced in Module 1:

chickens wings hen cock chick flock meat eggs

Chickens are birds and have two legs and two wings. We get meat and eggs from chickens.

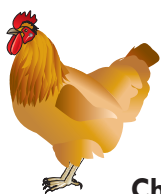
Following the introduction to chickens in Module 1, students will now be introduced to the topic of poultry.

### Keywords for this lesson:

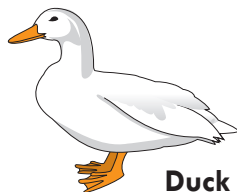
poultry turkey duck goose feathers claw beak bill webbed feet

## Poultry

**Poultry** is the name given to birds that provide us with meat or eggs. The chicken, the **turkey**, the **duck** and the **goose** are the birds most commonly kept by farmers in Ireland. All types of poultry have two wings, two scaly legs and are covered in **feathers**, but there are differences between them.



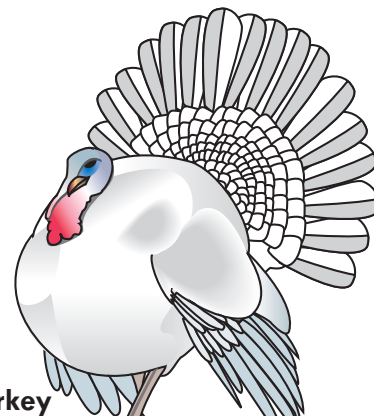
Chicken



Duck



Goose



Turkey

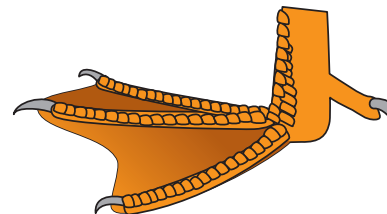
### Chickens and Turkeys

The chicken and the turkey are similar in two main ways. Firstly they both have feet called **claws**, secondly these claws are very strong for scratching the earth and finding food. They both have sharp **beaks** for pecking at insects and grain.



## Ducks and geese

The duck and the goose are also similar to each other. They both have **bills**, which help them to eat their food. The duck's bill allows it to feed in water while the goose's bill allows it to pick up grass. Both the duck and the goose have **webbed feet**, which they need for swimming.



## Flying

Most birds use their wings to fly. Chickens and turkeys are exceptional birds as they are not good at flying. They can fly up onto their perches or over a fence but they spend most of their lives on the ground. Ducks and geese can fly very well. If they are being kept in an open-topped pen, they must have the feathers of one wing shortened so that they cannot fly away. Clipping the feathers is like getting a haircut and does not hurt the bird.

### Suggested activities:

- Photocopy the activity sheet on page 46
- Discuss poultry and explore what different poultry breeds look like. Encourage students to use correct vocabulary. Ask students to draw labelled pictures that will clearly show the eyes, beak, feet and feathers. If possible, get students to label the different products we get from poultry (eggs and meat)
- Hot seat! Pick students at random and ask them to choose different farm animals. E.g. the chicken cackles, the cock crows, the turkey gobbles, the duck quacks, the goose hisses, the cattle low, the sheep bleats, the sheepdog barks, the pig grunts and the horse neighs
- Movements and adaptations! Discuss the differences and similarities between poultry and humans e.g. claws and webbed feet compared to human hands and feet; beaks and bills compared to human mouths.
- Conduct a bird survey and allow students to find and discuss the similarities and differences between the various birds on the farm and around their school/home. Tally the class survey and see if there is a trend
- Examine feathers in class. Research and list the types of birds that fly and those that don't. Discuss the possible reasons for this, e.g. size Discuss the migration of certain birds, e.g. the swallow
- Discuss the fact that people, animals and plants depend on one another and that we rely on farming for food (see 'The Irish farmer', page 2)
- Movements and Adaptations: Examine feathers in class and how they help birds fly. Create a Venn diagram and label as 'common', 'uncommon' and 'similar'
- For extension material, see Modules 3 and 4

### Learning outcomes:

At the end of this lesson, students should understand the word poultry and know the most common types of poultry in Ireland. They should also be able to compare and contrast the chicken, turkey, duck and goose.

### Additional resources:

- [www.agriaware.ie](http://www.agriaware.ie)



## Cereals and grasses

### Curriculum Links:

- **Science** Living things  
Environmental awareness and care
- **Geography** Human environments
- **SPHE** Myself and the wider world

### Lesson objectives:

To revise material covered in Module 1. To make students aware that grass and cereals provide food for both animals and humans. To introduce students to different parts of the cereal plant.

### Teacher guidelines

It is suggested that teachers ensure that students are familiar with the vocabulary and concepts introduced in the previous module before starting this lesson.

### Keywords and concepts introduced in Module 1:

grass wheat oats barley cereals grains

Grass is the most common plant in the world. Grass is very important because many animals eat it. Cereals are types of grass with grains that can be used for food for humans and animals. Wheat, oats, barley, rice and corn (maize) are types of cereals.

After revision of the above, teachers could discuss the more detailed information below.

### Keywords for this lesson:

ears leaves stalks flour breakfast cereal bread pasta rice maize (corn)



### Cereals

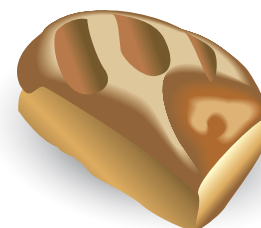
Each fully grown cereal plant is made up of **ears**, **leaves** and **stalks**. The ear is also known as the 'head' and it contains the grains.

It is the grains of the cereals that are used to make food. Cereal grains are used to make food for people but can also be used to feed animals. For example, chickens eat grain.

The three main cereals grown in Ireland are wheat, oats and barley.

### Wheat

**Wheat** is a type of cereal. Each ear of wheat normally contains 54 grains. Wheat grains are particularly important because they are used to make **flour**, which can be used in baking and many other products. Wheat is used to make **breakfast cereals**, **bread**, **pasta**, biscuits, cakes and pizza bases.



## Oats

Oats are used to make porridge and muesli. They can also be used to make flapjacks and biscuits.

## Barley

Barley is used in the production of alcohol and malt vinegar. It can also be used in the production of breakfast cereals.

## Other cereals

**Rice** and **maize (corn)** are two other important cereals. They can be used to make many products from breakfast cereals to popcorn and rice cakes.



### Suggested activities:

- Photocopy the activity sheet on page 47
- Discuss the word 'cereal'. Help students to distinguish between the everyday use of the word 'cereal', which generally refers to breakfast cereal and the meaning of the word in this lesson
- Draw a picture of wheat. Label with the words ear, leaves, stalk and grains
- Ask students to examine their kitchens and list the cereal products they find
- Discuss how wheat can be used to make flour and list products made from flour
- Extend your knowledge of all of the above to create an infographic/wall chart showing the process of bread making from field to fork
- Discuss the different types of bread for example baguette, wholegrain bread, white bread and the different ways bread can be eaten e.g. toast, sandwiches, french toast
- Discuss the fact that people, animals and plants depend on one another and that we rely on farming for food. (See 'The Irish farmer' page 2)
- For extension material, see Modules 3 and 4

### Learning outcomes:

At the end of this lesson, students should be aware of the importance cereal plays in the diet of both animals and humans. They should know the main cereals grown in Ireland and their associated products.

### Additional resources:

- [www.agriaware.ie](http://www.agriaware.ie)



## Fruit and vegetables

### Curriculum Links:

- **Science** Living things  
Environmental awareness and care
- **Geography** Human environments
- **SPHE** Myself and the wider world

### Lesson objectives:

To revise material covered in Module 1. To introduce students to the main features of apples and potatoes and their associated products.

### Teacher guidelines

It is suggested that teachers ensure that students are familiar with the vocabulary and concepts introduced in the previous module before starting this lesson.

### Keywords and concepts introduced in Module 1:

fruit vegetables healthy apple strawberry potato mushroom

We should eat at least five portions of fruit and vegetables a day, as they are healthy foods. Fruits grow on trees and bushes. Apples, strawberries and other berries are the main fruits grown in Ireland. Oranges and bananas are not grown in Ireland because the weather is not hot enough. The most popular vegetables grown in Ireland are potatoes and mushrooms. We also grow a variety of other vegetables.

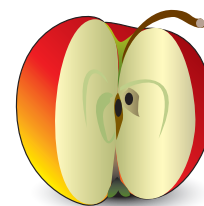
After revision of the above, teachers could discuss the more detailed information below.

### Keywords for this lesson:

stalk core seeds root vegetables crisps chips waffles

### What are apples?

Apples are one of the main fruits grown in Ireland. Apples grow on trees and they are picked when they are ripe. The **stalk** (which sticks out of the top of the apple) is what attaches them to the tree.



Apples come in many different colours e.g. red, yellow and green and they have a tough outer skin. The inner part of the apple, which we do not eat, is called the **core**. The core contains the apple **seeds**, which are often called pips.

### What do we get from apples?

We all like to eat apples as a healthy snack but apples can be used in many different ways. Apples are used to make desserts e.g. apple tart, apple crumble, toffee apples. They are used to make products like apple juice, cider vinegar and sauces like apple sauce.



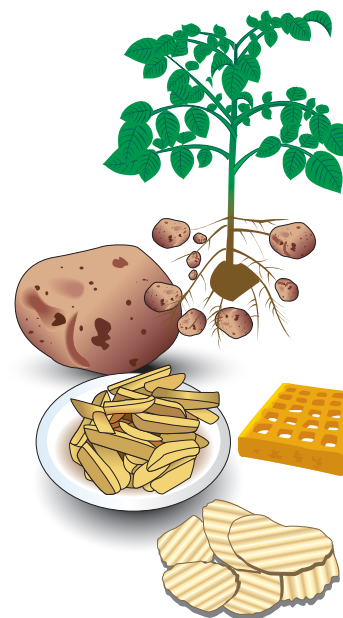
## What are potatoes?

Potatoes are **root vegetables**. This means that the potato itself grows under the ground and the green plant attached to it grows above the ground. When this plant withers, the potato is fully grown and the farmer must dig up (harvest) the potatoes.

Potatoes are different to other vegetables like carrots and broccoli. They contain potassium and vitamin B6 and are considered an energy rich food. Potatoes have a thick outer skin which can be eaten or removed. Potatoes are always cooked before eating.

## What do we get from potatoes?

Potatoes are used in many meals and can be served as roast potatoes, mashed potatoes, baked potatoes or boiled potatoes. They are also used to make **crisps**, **chips** and **waffles**. Chips are potatoes, that have been chopped up into thin chunks and fried or baked. Crisps are potatoes that have been sliced thinly and fried in hot oil until they are crispy and have flavours added. It is better to eat potatoes that have not been fried (see Healthy Eating, page 5).



### Suggested activities:

- Photocopy the activity sheet on page 48
- Do a lunchbox survey to find out how many students have apples with them for their lunch and what types of apples they are
- Peel an apple to show the skin, then cut it in half to show the students the core and the seeds
- Discuss the many different ways we eat potatoes. Conduct a classroom survey to find out the most common way of eating potatoes in the student's home. Discuss the healthier methods of cooking potatoes
- Ask students to draw pictures of their favourite fruit and vegetables, then use these pictures to form pictograms for 'The favourite fruit and vegetable in the class' display
- Discuss fairytales and stories which use apples e.g. Snow White, William Tell
- Discuss the importance of eating at least five portions of fruit and vegetables a day (see Healthy Eating page 4)
- Discuss the fact that people, animals and plants depend on one another and that we rely on farming for food. (See 'The Irish farmer' page 2)
- Design a growing space for your class/school and register for Agri Aware's Incredible Edibles healthy eating project to receive free compost and seeds to start your own grow patch
- For extension material, see Modules 3 and 4

### Learning outcomes:

At the end of this lesson, students should know the main features of fruit and potatoes and be aware of some of their associated products.

### Additional resources:

- [www.agriaware.ie](http://www.agriaware.ie)
- [www.theincredibleedibles.ie](http://www.theincredibleedibles.ie)
- [www.bestinseason.ie](http://www.bestinseason.ie)
- [www.potato.ie](http://www.potato.ie)



## Farm and countryside safety

### Curriculum Links:

- Science Living things
- Geography Human environments  
Natural environments
- SPHE Myself  
Myself and the wider world

### Lesson objectives:

To encourage students to be aware of water in the countryside. To understand how students can stay safe around rivers, lakes, streams and containers of water.

### Teacher guidelines

In 2019, 19 people died in farm accidents (HSA, Ireland). The most common cause of farm accidents in Ireland is from tractors and other farm machinery. With that said, some children in Irish classrooms may be affected by farm and countryside accidents, and as such, this may be a sensitive subject for some children. It is suggested that the teacher introduces students to the basic concept of farm and countryside safety before starting the lesson.

### Keywords and concepts introduced in Module 1:

animals fences gates pens roads safe cross code

The countryside can be a dangerous place if we are not aware of how to stay safe there: climbing fences, entering fields, pens and crossing busy roads are all potentially dangerous activities.

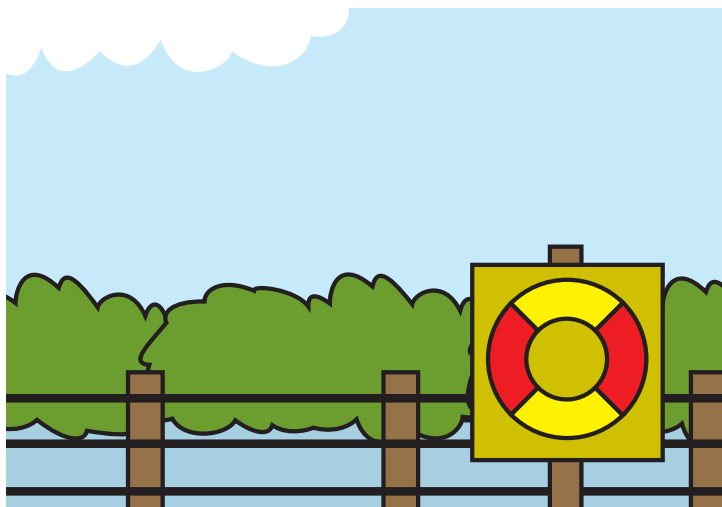
After revision of the above, teachers could discuss the more detailed information below.

### Keywords for this lesson:

rivers lakes ponds streams environment barrels silage slurry

### Rivers, lakes and ponds

Farmers put up fences around **rivers**, **lakes** and **ponds** to prevent animals or people from falling into them. This also protects the water from getting dirty. Reeds and grass can often hide the edge of the pond so extra care is needed when walking through fields or wooded areas where there might be ponds. Be aware of any water on the farm. Do not walk, play or work too close to ponds, **streams**, wells or rivers. If you see someone getting into difficulty, do not attempt to go into the water. Go to an adult for help or call 999. We should never litter our waterways as it causes damage to our **environment** as well as to animals.



## Fences and bridges around waterways

Do not play around waterways. Always tell an adult where you are going. Do not climb over fences or play around bridges as you could fall into the water.

## Water containers

When on the farm you may see large containers or **barrels** at the end of downpipes from roofs. This is for the rainwater to be collected and used around the farm. This water is not safe for us to drink. Collecting rainwater is also environmentally friendly. A farmer may sometimes have a trough in a field for his/her animals to drink from. Do not play around this as you may fall in and there is a danger of drowning.

## Be safe around slurry pits

If you live on or are visiting a farm, you should ask the farmer if there is a **silage** or slurry pit on the farm. Do not walk, play or stand too close to either of these as they can be deep and very dangerous. The farmer keeps slurry tanks covered or fenced to keep children out and away from danger.



## Suggested activities

- Photocopy the activity sheet on page 49
- Sinking and floating – collect a number of classroom objects and predict whether they will sink or float and carry out the experiment in class. Record the results
- Discuss how different farm animals use water in different ways, i.e., ducks swim, cows drink etc.
- Form an eco-committee in your class. Survey how clean is your school and discuss what can be done to keep our water ways clean
- Inform students of what they should do if they see someone in difficulty in the water. Discuss water safety in the swimming pool as part of an aquatics PE lesson
- Watch Agri Aware's 'Once Upon a Farm' and discuss the potential dangers associated with the slurry scene
- Read the story 'The ugly duckling' and 'The pig is in the pond'
- For extension material, see Modules 3 and 4
- Sign your class up to participate in the "Farm Safe Schools" interactive programme. For more information on how to register your class, visit: [www.farmsafeschools.ie](http://www.farmsafeschools.ie)

## Learning outcomes:

At the end of this lesson, students should know how to stay safe around water, to understand the dangers of slurry pits and know that they must stay away from them.

## Additional resources:

- [www.agriaware.ie/farmsafety](http://www.agriaware.ie/farmsafety)
- Check out Agri Aware's 'Once Upon a Farm' video on YouTube
- [www.fbd.ie/farm/farm-safety](http://www.fbd.ie/farm/farm-safety)
- [www.agrikids.ie](http://www.agrikids.ie)



## Machinery safety

### Curriculum Links:

- **Science** Energy and forces  
Environmental awareness and care
- **Geography** Human environments
- **SPHE** Myself  
Myself and the wider world
- **History** Stories

### Lesson objectives:

To give students an insight into the importance of staying safe around machinery on the farm, looking in particular at the tractor.

### Teacher guidelines

In 2016, 21 people died in farm accidents of which one was a child (HSA, Ireland). Tractors and machinery are the most common cause of farm accidents in Ireland. With that said, some children in Irish classrooms may be affected by farm and countryside accidents, and as such, this may be a sensitive subject for some children. It is suggested that the teacher introduces students to the basic concept of machinery before starting the lesson.

### Keywords and concepts introduced in Module 1:

**machinery farm tractor trailer plough combine harvester**

All farm machinery can be dangerous and you should not go near, climb onto or touch any of these machines.

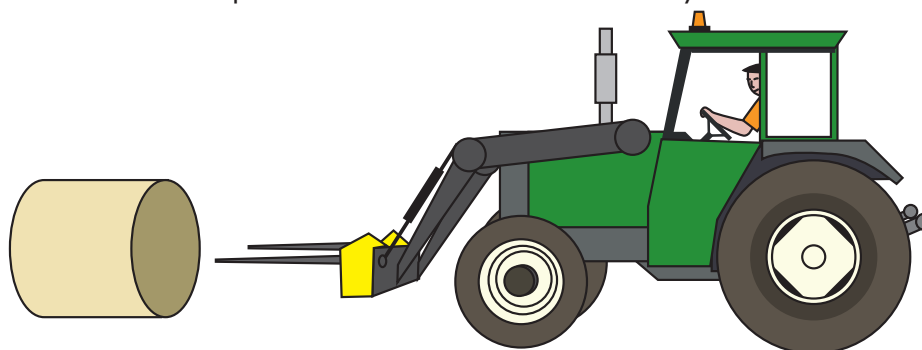
After revision of the above, teachers could discuss the more detailed information below.

### Keywords for this lesson:

**wheels trapped safety belt drawbar ignition handbrake**

### The multi-purpose modern tractor

Tractors are essential on the farm and they are the most useful machine that farmers use to carry out many of the jobs they do each day. Farmers use tractors to pull trailers, to spread fertiliser on fields and to check his/her animals. Tractors are big, powerful machines and the farmer's job is to make sure that children do not go near them. Farmers drive at a safe speed around the farm and are always on the lookout for children and adults.





## Dangers of tractors and other farm machinery

Machines like tractors and trailers can be dangerous when they are moving. Your arm, leg or your clothes could very easily get **trapped** in the moving **wheels** of a tractor so stay safe. You cannot take a lift on a tractor unless it has a seat that is specially made for children with a **safety belt** to keep children from falling out. It is very dangerous to stand up on a tractor as you might fall out and under it while moving. Never ride on high loads on a trailer or on the **drawbar** of a trailer. Children under the age of 14 must not be allowed to drive or operate tractors or mechanically propelled machines such as teleporters, jeeps, ATVs etc. If you are visiting a farm, make sure that the farmer knows that you are there as they may not see or hear you. Always play in a safe place away from where tractors are parked or are working. Never stand behind a tractor as the farmer may not see you. If you are near a tractor, make sure that the farmer or an adult is with you at all times.



## Precautions the farmer takes with an unoccupied tractor

When the farmer is not using the tractor he or she makes sure that people are not in danger by taking the keys out of the **ignition** and putting the **handbrake** on.

### Suggested activities

- Photocopy the activity sheet on page 50
- Discuss the different types of machinery found on the farm. Why do they differ from job to job and used at different times of the year?
- Divide class into groups of three or four and get them to come up with ways to stay safe on the farm
- During computer time, get pupils to investigate photographs of old farm machinery and discuss how it has changed and evolved through the ages
- Create an acrostic poem about the 'TRACTOR'
- Watch Agri Aware's 'Once Upon a Farm' and discuss the potential dangers associated with the farm machinery scene
- For extension material, see Modules 3 and 4
- Sign your class up to participate in the "Farm Safe Schools" interactive programme. For more information on how to register your class, visit: [www.farmsafeschools.ie](http://www.farmsafeschools.ie)

### Learning outcomes:

At the end of this lesson, students should know what the tractor is used for by the farmer and how to stay safe around tractors.

### Additional resources:

- [www.agriaware.ie](http://www.agriaware.ie)
- Check out Agri Aware's 'Once Upon a Farm' video on YouTube
- [www.agrikids.ie](http://www.agrikids.ie)



## Electrical safety

### Curriculum links:

- Science      Energy and forces
- Geography    Human environments
- SPHE          Myself and the wider world

### Lesson objectives

To learn about the specific uses for electricity and its potential dangers and warning signs.

### Teacher guidelines

There have been 45 fatalities associated with an electrical work activity (HSA, 1999-2016). With that said, some children in Irish classrooms may be affected by electrical accidents, and as such, this may be a sensitive subject for some children. It is suggested that the teacher ensures that students are familiar with the vocabulary and the concepts introduced in the previous module before starting this lesson.

### Keywords and concepts introduced in Module 1:

**electricity    home    appliances    socket    dangerous    plug**

We use electricity everyday at home, on the farm and at school. Life would be very different if we did not have electricity. You must never play near a power supply as you can get seriously hurt.

After revision of the above, teachers could discuss the more detailed information below.

### Keywords for this lesson:

**warning    signs    electric fences    red light    overhead electricity wires**



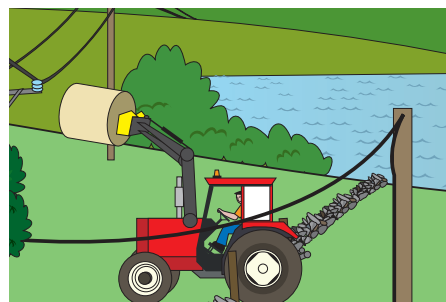
**DANGER SIGN**

### Electrical warning signs

Look out for danger **signs** on the farm and in the countryside **warning** you about electricity. Whenever you see a danger sign like this one pictured, you are close to a high voltage electricity supply. Remember to be careful and stay away from places marked with a danger sign.

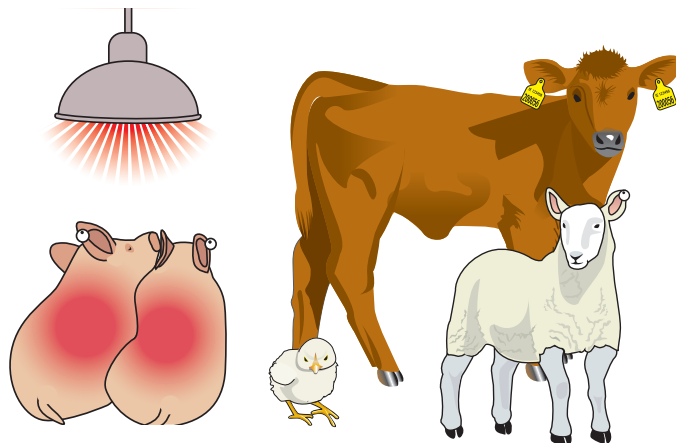
### Stay safe from overhead electricity wires

**Overhead electricity wires** are all around us – in the countryside and in our villages, towns and cities. Electricity wires can be very dangerous. Never climb a pole or a tree that is near to a power line. Never fly a kite, fly a drone or fish near overhead electricity wires. If something you are holding comes close to or in contact with an overhead wire, it could injure or kill you.



## Electricity and young livestock

When new animals are born on the farm, they may need to be kept warm, especially if the weather is very cold or if they are born outside. Farmers sometimes place lambs, calves, chicks or piglets under a **red light** which is a special light to help the newborn animals keep warm. We need to be careful around these lamps, as they are very warm and you could get burned if you touch them. The farmer must have a bedding of straw or hay for the newborn animal. The farmer must take great care in making sure that the lamp is a safe distance from the hay or straw as it could smoulder and catch fire.



## Stay safe around electric fences

Farmers put up **electric fences** to keep animals in a particular area or field. Do not play around these fences because if you touch them, you could be seriously injured.



### Suggested activities

- Photocopy the activity sheet on page 51
- Discuss electricity in the home and at school and its uses
- Ask the students to draw a picture of a farm showing how a farmer uses electricity
- Rub a balloon five times on your jumper and rub another balloon twenty times on your jumper. Place on a wall and record which one stayed the longest
- Watch Agri Aware's 'Once Upon a Farm' and discuss the potential electrical dangers on the farm
- See [www.esbnetworks.ie/education](http://www.esbnetworks.ie/education) for more on electricity safety
- For extension material, see Modules 3 and 4
- Sign your class up to participate in the "Farm Safe Schools" interactive programme. For more information on how to register your class, visit: [www.farmsafeschools.ie](http://www.farmsafeschools.ie)

### Learning outcomes:

At the end of this lesson, students should be able to identify electrical warning signs. Know the dangers of overhead electricity wires and electric fences and the potential dangers of a red light on the farm. For safety posters showing electrical hazards, 6 safety tips, as well as activities, lesson plans, competitions, online Match3 game and electrical safety videos, see [www.esbnetworks.ie/education](http://www.esbnetworks.ie/education).

### Additional resources:

- [www.agriaware.ie/farm-safety](http://www.agriaware.ie/farm-safety)
- [www.agrikids.ie](http://www.agrikids.ie)
- Check out Agri Aware's 'Once Upon a Farm' video on YouTube
- [www.esbnetworks.ie/education](http://www.esbnetworks.ie/education)

Developed with:





## Farm animal safety

### Curriculum links:

- **Science** Living things  
Environmental awareness and care
- **Geography** Human environments
- **SPHE** Myself  
Myself and the wider world

### Lesson objectives

To highlight the importance of staying safe around farm animals, particularly when animals are giving birth and looking after their young.

### Teacher guidelines

90% of farm accidents involve an unsafe act. Livestock (farm animals) are the third most common cause of farm accidents in Ireland. It is suggested that the teacher revises the different types of farm animals examined in previous lesson plans as well as introducing pupils to the vocabulary and basic concepts of safety before starting the lesson.

### Keywords and concepts introduced in Module 1:

**tame      dangerous      pet      touch      chute      newborn**

All farm animals can be dangerous. You should ask permission from the farmer before approaching, petting or touching any of the animals on the farm.

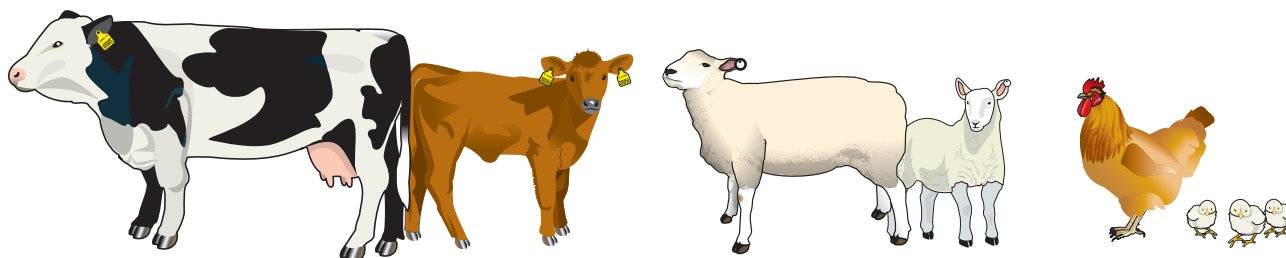
After revision of the above, teachers could discuss the more detailed information below.

### Keywords for this lesson:

**birth      newborn      protective      chicks      ducklings      feeding**

### Animals, their young and how to stay safe around them

Farms are busy and exciting places with lots of animals. It can be very exciting when animals such as cows, sheep or pigs give **birth** to **newborn** baby animals. Young cows are called calves. Young sheep are known as lambs and young pigs are called piglets. We should not disturb or annoy new mothers on the farm. This can be a busy and worrying time for the farmer as he/she has to make sure that the animals are safe. He/she may have to help the animals if they are unable to give birth on their own. If you are lucky enough to see an animal giving birth, you must listen to what the farmer says. However, we should not approach these animals as new mothers are very **protective** of their young and they might attack, kick, bite or peck you. We should keep any pets like cats and dogs away from mothers and their young.



## Handling of chicks and ducklings

Newborn **chicks** and **ducklings** are fragile creatures and we should be very careful when holding them as this may injure or frighten them. To pick up a chick or duckling we should place one hand under its tummy and place the other hand on top of it and hold it gently but firmly. Newborn chicks and ducklings may seem cute and cuddly but when handling them we must be careful not to squeeze them too hard or choke them. They are not strong enough to survive a fall so it is important not to drop them. Birds in general have hollow bones. Hollow bones are much lighter than regular bones and help birds to fly. They are also very fragile, meaning these bones break easily.

## Feeding of young animals

Only feed farm animals if you have the farmer's permission and if you are supervised by an adult. Do not attempt to feed animals on your own. If you are **feeding** animals in pens, do not enter the pen. Feed the animal from outside the pen as they could knock you down if you enter their living area.



## Suggested activities

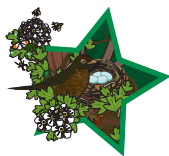
- Photocopy the activity sheet on page 52
- Find out the names of other young animals found on the farm
- In art class, get the students to draw/paint 'animal families' (e.g. ram, ewe and the baby lamb)
- Ask a local farmer about the lambing season
- Investigate the lambing season in Ireland and create a poster using cotton wool to depict sheep and lambs. Discuss how we use wool and yarn as a natural resource
- Create a sequence chart highlighting the life cycle of a chick
- For extension material, see Modules 3 and 4

## Learning outcomes:

At the end of this lesson, students should know that animals are potentially more dangerous when around their young. They should also know how to handle young animals.

## Additional resources:

- [www.agriaware.ie](http://www.agriaware.ie)
- Check out Agri Aware's 'Once Upon a Farm' video on YouTube
- [www.agrikids.ie](http://www.agrikids.ie)



## The hedgerow

### Curriculum Links:

- **Science** Living things  
Environmental awareness and care
- **Geography** Human environments
- **SPHE** Myself and the wider world

### Lesson objectives:

To highlight the importance of the hedgerow for the survival of plants and animals. To introduce students to food chains that exist on the farm.

### Teacher guidelines

It is suggested that teachers ensure all students are familiar with the vocabulary and concepts introduced in the previous modules before starting this lesson.

### Keywords and concepts introduced in Module 1:

**hedgerow**

**fields**

**flowers**

**season**

**overgrown**

**birds**

Hedgerows are big bushes that divide up the farmer's fields. The farmer makes sure to care for the hedgerow by trimming it regularly.

After revision of the above, teachers could discuss the more detailed information below.

### Keywords for this lesson:

**shrubs**

**wildlife**

**shelter**

**nests**

**food chain**

### Why are hedgerows important?

Let's take a look inside the hedgerow. These **shrubs** and bushes are actually home to lots of animals, insects, plants and birds. These are great places for **wildlife** to live because they can find food and get **shelter** from the cold. Birds make their **nests** up high and insects burrow into the soil. Larger animals such as foxes and hedgehogs also live in the bushes.



Insects provide food for birds



Birds make their nests



Hawthorn flowers attract insects



Insects among the dead leaves



Hedgehogs live in the hedgerow



Foxes live in the hedgerow

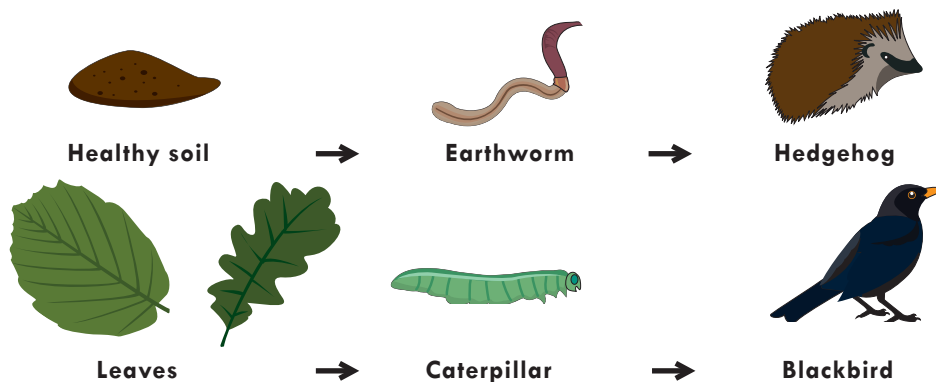
## What is a food chain?

All the different creatures in the hedgerow depend on plants and each other to survive. They are linked together by what they eat and how they get their energy. This system is called a **food chain**.

Many food chains exist within the hedgerow. As you move along the food chain, the animals get bigger and fewer. For example, there are thousands of leaves on the farm which are eaten by hundreds of earthworms. Many blackbirds eat the earthworms. Foxes which are much bigger feed on the birds.

## Food chains in the hedgerow

In order for there to be a balance on the farm, including the grass to grow, soil to be moist and animals to be healthy, the farmer must protect the many food chains that exist in the hedgerow by taking care of it.



### Suggested activities

- Photocopy the activity sheet on page 53
- In art class, get the students to make mobiles of food chains
- Split the class into groups. Each group should name one animal that lives on the farm. They must then build a food chain around that animal
- Perform a drama based on a number of different animals looking for the same food. The important message that should be communicated at the end of the drama is that even though these animals fight for food, they must all still live together in harmony within the hedgerow
- Get the class to build their own bird table
- Assign each student one member of the food chain. Get the students to link arms in the order of the food chain
- For extension material, see Modules 3 and 4

### Learning outcomes:

At the end of this lesson, students should know what a food chain is and the different food chains that exist in the hedgerow.

### Additional resources:

- [www.agriaware.ie](http://www.agriaware.ie)





## Air and trees

### Curriculum Links:

- **Science** Living things  
Environmental awareness and care
- **Geography** Human environments
- **SPHE** Myself and the wider world

### Lesson objectives:

To teach students about the different food chains that exist in the tree and to introduce the concept of herbivores, carnivores and omnivores. To emphasise how important trees are for the farm and countryside.

### Teacher guidelines

It is suggested that teachers ensure that students are familiar with the vocabulary and concepts introduced in the previous modules before starting this lesson.

### Keywords and concepts Introduced in Module 1:

trees trunk roots tunnels branches air

Trees are all around us and each part of the tree has its own important job. Trees also help keep our air fresh and clean.

After revision of the above, teachers could discuss the more detailed information below.

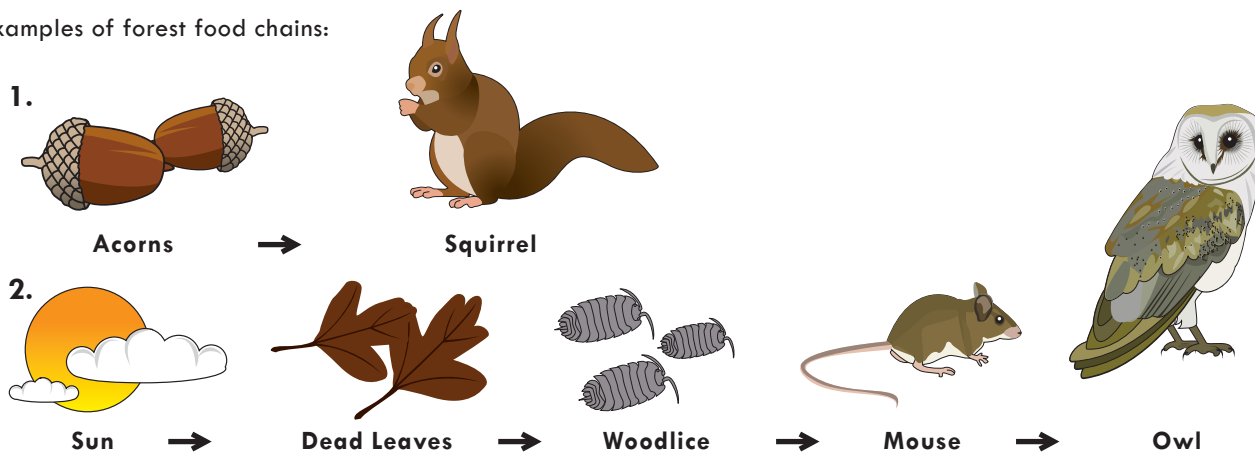
### Keywords for this lesson:

herbivores carnivores omnivore shelter drained

### Food chains

We have already learned that many food chains exist in the hedgerow. You will also find some food chains in the tree. Think of all the creatures that make their homes in the tree. Birds build their nests here, squirrels find homes in little hollows and rabbits burrow under the roots. They must all get food and so they depend on other species within the tree. Look at these different food chains, found in the woodland below.

Examples of forest food chains:





## The different creatures of the food chain

You might notice that in the food chain, some animals only eat plants, such as cows, sheep, rabbits, slugs and snails. These are called **herbivores**. Those that eat other animals, such as foxes and owls, are called **carnivores**. Humans are called **omnivores** as we eat both plants and animals.



Herbivores



Carnivores



Omnivores

## Why are trees important on the farm?

The farmer takes good care of trees on the farm. The tree will take good care of the plants and animals on the farm. When the rain starts falling, the trees are the first place that animals such as cows and sheep will go to for **shelter**. Trees are also home to birds, small animals and insects.

The tree also helps the soil. Roots hold the soil together and soak up water. This helps prevent the farm from flooding. Soil that is well **drained** is very healthy and will produce good crops and grass. The leaves on the tree also help to produce clean air.

### Suggested activities

- Photocopy the activity sheet on page 54
- Get the class to create a collage of food chains that exist in trees
- List all the birds, plants, animals and insects that live in trees
- Go on a nature walk. Identify signs of life that exist in or around the tree
- Gather different leaves on your nature walk and identify which trees the leaves fell from
- Game: Place the words 'herbivore, carnivore, omnivore and decomposer' on the classroom wall. Get the pupils to go over to the correct word when that particular animal, insect, bird is shouted out. Don't forget to mention all the animals that you might see in and around the farm
- Get one pupil to stand at the top of the classroom. They must choose a herbivore, carnivore or omnivore without telling the rest of the class. The rest of the class should guess what creature they are thinking of. They can only ask 'Yes' or 'No' questions
- For extension material, see Modules 3 and 4

### Learning outcomes:

At the end of this lesson, students should know about herbivores, carnivores and omnivores. They should also know why trees are important for the farm and countryside.

### Additional resources:

- [www.agriaware.ie](http://www.agriaware.ie)



## Water

### Curriculum Links:

- **Science** Living things  
Environmental awareness and care
- **Geography** Human environments
- **SPHE** Myself and the wider world

### Lesson objectives:

To understand that water moves in a cycle. To understand that water is needed on the farm and how the farmer protects and cares for waterways.

### Teacher guidelines

It is suggested that teachers ensure that students are familiar with the vocabulary and concepts introduced in the previous modules before starting this lesson.

### Keywords and concepts introduced in Module 1:

**water**      **clouds**      **raindrops**      **water cycle**      **live**      **smell**

Fresh, clean water is very important on the farm because all the animals and crops need it to grow. The farm always has a fresh supply of water because of the constant movement of the water cycle.

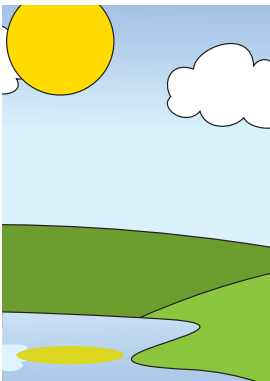
After revision of the above, teachers could discuss the more detailed information below.

### Keywords for this lesson:

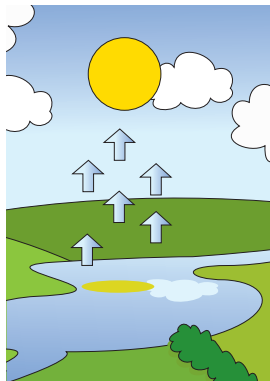
**water vapour**      **fences**      **manure**      **food chains**

### The movement of water on the farm

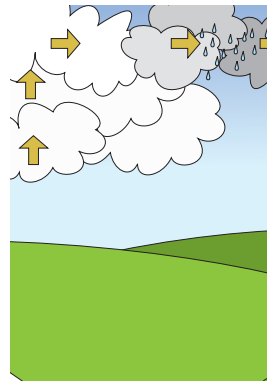
Water moves in a cycle. The sun heats water on the ground and changes it into **water vapour** or steam (just like heating water in a kettle). This water vapour rises into the sky and forms clouds. As the clouds float higher and higher, they get colder. Water vapour then changes back to water droplets. This falls back to earth in the next rainfall. This cycle goes on and on and on!



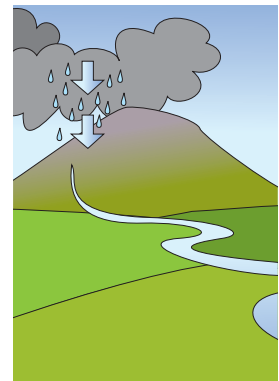
Sun heats the water on the ground



Water vapour rises and forms clouds



Water vapour changes into drops of water



Rain falls into rivers, lakes and streams

## How does the farmer care for water?

The farmer works hard to have clean and safe water on the farm to help plants and animals to grow. He/she puts up **fences** around rivers, streams and wells so that animals and machines can't make the water dirty.

At certain times of the year, the farmer puts manure on crops. Manure is animal waste which is also food for the crops which helps them to grow. The farmer is very careful when he or she spreads manure, making sure it doesn't fall into nearby rivers or streams. Although it is very good for the soil, **manure** is dangerous if it gets into the water supply.



## Food chains in the water

Just like in hedgerows, food chains also exist in water. The sun shines into the water so that water plants can grow. Water snails and other insects living in the water, eat water plants. Fish then eat the water snails and other insects to grow larger and swim faster. However, if the water in lakes and rivers gets dirty, it can be difficult for the sun to shine through and reach the plants. If they die, so will the water insects who eat them. The fish may also die. The farmer keeps the waterways clean so there are no breaks in the food chain.



### Suggested activities

- Photocopy the activity sheet on page 55
- Divide the class into groups. Get each group to design a poster explaining the water cycle and allow each group 5 minutes to present it to the entire class
- Draw a food chain that exists in the lake
- Get the students to discuss why the sun is important in all food chains
- Observation diary: plant 4 cress seeds, water one and keep in the dark, the other three, keep on a windowsill with lots of light, water one really well, water one too much and don't water the last. Record your daily observations and discuss the farmer's job in producing crops, fruits and vegetables and based on your observations, what might happen if plants are not minded correctly
- The farmer works hard to keep waterways clean. What can we all do individually to make sure that waterways do not get dirty?
- Discuss why water is important for life
- For extension material, see Modules 3 and 4

### Learning outcomes:

At the end of this lesson, students should know how the farmer protects the water and what food chains exist in the water.

### Additional resources:

- [www.agriaware.ie](http://www.agriaware.ie)



## Soil

### Curriculum Links:

- **Science** Living things  
Environmental awareness and care
- **Geography** Human environments
- **SPHE** Myself and the wider world

### Lesson objectives:

To get the students to identify the different creatures that live in the soil. To understand that healthy soil is full of nutrients and that the farmer works hard to keep it fertile.

### Teacher guidelines

It is suggested that teachers ensure that students are familiar with the vocabulary and concepts introduced in the previous modules before starting this lesson.

### Keywords and concepts introduced in Module 1:

soil insects animals healthy wheat barley

Soil is home to many insects and animals and it needs lots of water to stay healthy. Healthy soil is very important for both animals and crops.

After revision of the above, teachers could discuss the more detailed information below.

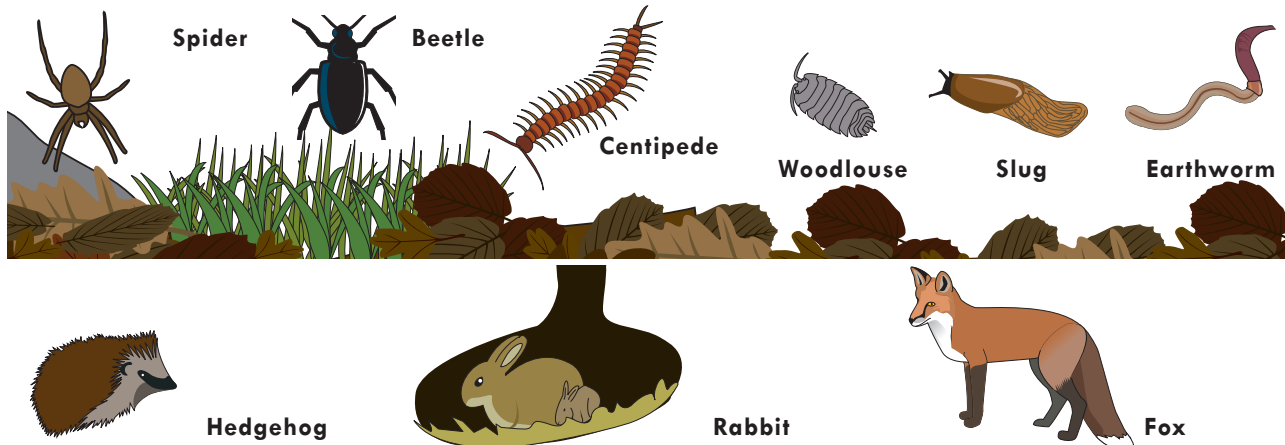
### Keywords for this lesson:

earthworms millipedes centipedes nutrients fertile

### Who lives in the soil?

Soil is home to many insects including **earthworms**, **millipedes**, **centipedes**, woodlice and beetles. These insects feed on dead leaves and animals and they help to break down the soil. These insects are very important to the farmer because they help keep the soil crumbly (to make sure it does not stick together). Soil is also home to other animals such as rabbits, hedgehogs, badgers and foxes. Earthworms are especially important for healthy soil. They will dig tunnels through the soil, which helps roots and plants to grow. A healthy soil will have lots of earthworms in it.

Plants have their roots in the soil and all the farmer's crops need soil to grow.



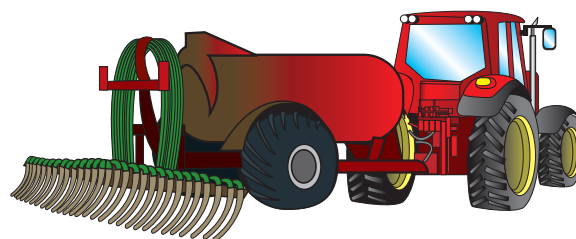
### Why does the farmer need to keep the soil healthy?

The farmer needs good, healthy soil, on his/her farm as it helps crops, plants and animals to grow. Healthy soil, like healthy food, has lots of minerals and **nutrients** in it. Another word for healthy soil that is full of nutrients is **fertile** soil. When water is mixed with these nutrients, plants and crops suck this mixture up through the roots. Soil should not be too wet or not too dry. If the soil is too wet, it gets heavy and drowns the plants and when it is too dry, the plants die from thirst. A farmer can smell his/her soil to check if it is healthy. A healthy soil will smell earthy as there will be lots of air in it.



### What does the farmer do to keep the soil healthy?

If soil does not have enough minerals and other nutrients, crops will not grow properly and animals will not have enough food. Sometimes the farmer sends a sample of soil to a laboratory to be tested. If the soil does not have enough nutrients, the farmer has to add more. He or she does this by spreading manure, which is stored in tanks on the farm. This is animal waste which has lots of nutrients that the soil needs to stay healthy.



### Suggested activities

- Photocopy the activity sheet on page 56
- Build a compost heap, wormery or bug hotel in your school. Get pupils to create a checklist of everything they think they need. Once built, create an observation chart for your classroom wall and daily, list the animals and insects you see. Which ones depends most on soil?
- Watch the film, 'A Bugs Life' with the students and discuss all the different types of insects that live in the soil
- Get the students to draw two pictures, one of plants living in waterlogged soil and another of plants living in dry soil
- Get the students to draw a picture of plants sucking in nutrients and water from the soil through their roots
- Plants get their nutrients from the soil. Discuss where people get nutrients from (Learn more about healthy eating on pages 4 and 5 of *Dig In! Learning about life on the farm and in the countryside-Module 2*)
- Take pictures and observe the soil in different weather e.g. when it is sunny, frosty, raining etc.
- For extension material, see Modules 3 and 4

### Learning outcomes:

At the end of this lesson, students should be able to identify the different creatures that live in the soil and understand what the farmer does to keep the soil healthy and why.

### Additional resources:

- [www.agriaware.ie](http://www.agriaware.ie)



## Dig in to CAP!

### Curriculum Links:

- **Science** Living things  
Environmental awareness and care
- **Geography** Human environments
- **SPHE** Myself and the wider world

### Lesson objectives:

To illustrate the important role of the Common Agricultural Policy (CAP) to the life of an Irish person, including the role that CAP plays in: (a) assisting farmers in making quality food affordable for people; (b) keeping our countryside beautiful, which is enjoyed by Irish people and also attracts tourists to Ireland; (c) contributing to the Irish economy, as many jobs come from agriculture, and (d) making sure that our animals are well cared for.

### Teacher guidelines

It is suggested that the teacher ensures that students are familiar with the vocabulary and concepts introduced in the previous module before starting this lesson.

### Keywords and concepts introduced in Module 1:

**farmer      food      countryside      shop      job      community**

CAP is the name given to a set of rules for farmers. The role of CAP is to ensure that farmers can produce enough quality and safe food for everyone to eat, that they can keep the countryside clean and safe and provide a safe home for animals in their care. CAP is important as almost all of the food that we eat each day comes from the farm.

After revision of the above, teachers could discuss more keywords for this lesson as detailed below.

### Keywords for this lesson:

**vet      contractor      farm to fork**

### What is CAP?

CAP means the Common Agricultural Policy. It represents a series of payments and supports for farmers.

### Why is the Common Agricultural Policy (CAP) important?

CAP helps the farmer to produce high quality food that is safe and it also ensures that people can afford to buy it.

CAP helps the farmer to take care of the countryside and to ensure high animal welfare standards. Without farming, many other jobs would not exist. In Ireland, one in every seven people have a job that is linked to farming. As a result, CAP is very important to Ireland's economy.

### Who does the farmer work with?

Farmers work with lots of different people in the community. The **vet** helps the farmer to keep the animals on the farm healthy and he/she cares for the animals if they are sick.



**Vet**

The farmer works with many contractors who do work on the farm, for example the building contractor, the fencing contractor and the machinery contractor.

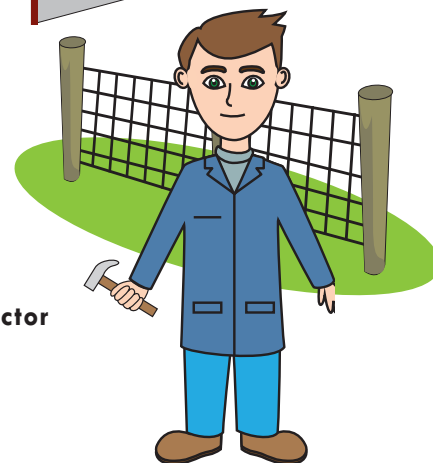
- The building **contractor** builds farm buildings to house and protect animals and crops
- The fencing contractor builds fences on the farm, helping the farmer to keep animals safe and to protect crops
- The machinery contractor helps the farmer to harvest crops, to spread slurry and to make silage and hay for animals to eat

Fruit, vegetables, meat, eggs and milk are brought from the farm to supermarkets, factories and restaurants, where they are prepared into food that people enjoy each day.

The farmer plays a very important role as he/she is the first link in the 'farm to fork' pathway of the food that we eat.



**Building contractor**



**Fencing contractor**

### Suggested activities

- Photocopy the activity sheet on page 57
- The class could visit the shops or businesses in the local area and discuss how they are linked to farming
- Interview someone in the local community and discuss the role that they play in farming; for example the local vet, greengrocer or fencing contractor
- Get the students to choose a person that they have identified as playing a role in farming. Get the students to design a poster of the person they have chosen, for example a poster of the vet, helping to care for animals on the farm
- Discuss the 'farm to fork' pathway and try to map out the journey of a specific food from the farm to your fork, through illustration and discussion
- For extension material, see Modules 3 and 4

### Learning outcomes:

At the end of this lesson, students should understand the role that CAP plays in the community where farmers live, because without farming many other jobs would not exist.

### Additional resources:

- [www.agriaware.ie/CAP](http://www.agriaware.ie/CAP)



## Sustainability

### Curriculum Links:

- **Science** Environmental awareness and care
- **Geography** Human environments
- **SPHE** Myself and the wider world

### Lesson objectives:

To revise material covered in Module 1. To discuss the effect that overuse of the earth's resources has on the environment and what methods are used to stop this.

### Teacher guidelines

It is suggested that the teacher ensures that students are familiar with the vocabulary and concepts introduced in previous modules before starting this lesson.

### Keywords and concepts introduced in Module 1:

environment    water    food    sustainability    future  
 green    recycle    earth    air    energy

The earth provides us with fresh air, clean water and food. To protect the earth for future generations, we must care for it.

After revision of the above, teachers could discuss the more detailed information below.

### Keywords for this lesson:

atmosphere    fossil fuels    renewable    non-renewable

### Energy

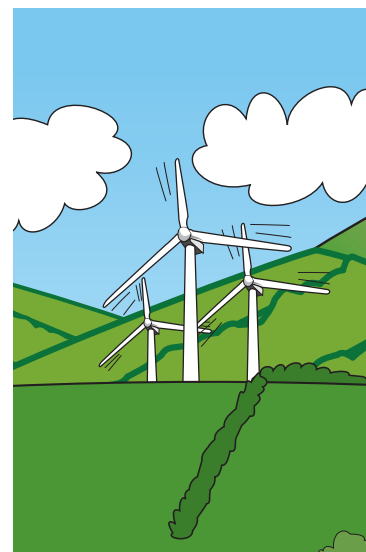
Energy is required for everything we do and we need it for lots of activities; for example, having a nice warm bath or getting home from school each day. Energy is used in every town, city, home and school in Ireland. As the world's population increases, the demand for the energy that we use each day increases.

### Types of energy

#### Renewable energy

Renewable energy is energy which comes from resources that are replenished naturally. Examples of renewable energy include sunlight, waves, wind and energy crops.

The sun is the most important source of renewable energy and it cools and warms the earth, which controls heat, rainfall and wind.





### Non-renewable energy

Non-renewable energy is energy that can only be used once. Non-renewable sources of energy come from fossil fuels. These fuels are created over millions of years from the remains of animals and plants and are used as the main source of energy on earth at present. There is a limited supply of these fuels so they are at risk of running out.

When fossil fuels are burned to create energy, they release gases known as 'greenhouse gases'. These have an effect on the earth's atmosphere by trapping the sun's heat inside the atmosphere, which makes the earth progressively warmer. This increase in temperature can lead to weather conditions quickly becoming too dry (drought) or too wet (flooding). These extreme weather conditions lead to problems for farmers, causing crops to fail and affecting the amount of food available for farm animals.



### Suggested activities

- Photocopy the activity sheet on page 58
- Invite the local environmental education officer from your County Council to come and speak about how students can protect the environment at home and in school
- Ask pupils to write an eco-pledge and each week assign a new eco monitor in your class. This person is responsible for checking the recycling and compost bins, making sure lights are turned off etc. At start of each week discuss how, as a class, you could improve from the previous week
- Allow pupils to create a timeline of their typical day, i.e. from the minute they wake up until they go to bed. Have them highlight and discuss the various methods that people use to get to school (cycling walking, bus, car) and the types of energy used throughout their day (cooking, cleaning, watching tv etc.)
- Go on a class nature walk and clearly identify ways in which animals/plants in the environment use the objects around them in their daily lives
- Have the class design positive promotional posters for around the school, i.e. turn off the lights; turn off the monitor, reduce, reuse, recycle, etc.
- For extension material, see Modules 3 and 4

### Learning outcomes:

At the end of this lesson, students should understand the difference between renewable and non-renewable energy. They should understand the effect of using renewable versus non-renewable energy.

### Additional resources:

- [www.agriaware.ie](http://www.agriaware.ie)
- [www.origingreen.ie](http://www.origingreen.ie)

Developed in consultation with:

**BORD BIA**  
IRISH FOOD BOARD



Working  
with nature



## Food security

### Curriculum Links:

- **Science** Living things, Environmental awareness and care
- **Geography** Human environments
- **SPHE** Myself and the wider world

### Lesson objectives:

To revise material discussed in Module 1. To discuss the reasons why particular countries suffer from food insecurity.

### Teacher guidelines

The Department of Social Protection stated that 600,000 people in Ireland in 2013 were affected by food poverty. One in five school children go to bed hungry every night. Many children in Irish classrooms may not have access to adequate amounts of food. As such, this topic may be a sensitive subject for some children. It is suggested that the teacher ensures that students are familiar with the vocabulary and concepts introduced in the previous module before beginning this lesson.

### Keywords and concepts introduced in Module 1:

**hunger food healthy weather aid extreme Africa Asia**

The earth provides us with fresh air, clean water and food. To protect the earth for future generations, we must care for it.

Food security means that every person has enough food to have a healthy diet and an active life. In some countries, people do not have enough food to stay healthy and strong.

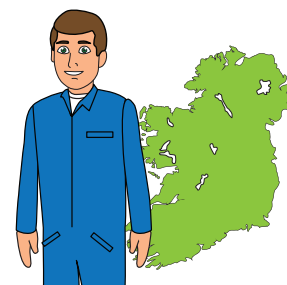
After revision of the above, teachers could discuss the more detailed information below.

### Keywords for this lesson:

**businesses trades fertile drought flood**

### Food security in Ireland

In Ireland, farm size varies from small family farms to large commercial farms. Over time, some Irish farms have developed to become **businesses**, where the farmer can sell the food that they produce to make money. The income that the farmer receives from selling the farm produce helps the farmer to buy more farm animals and crops. It also helps the farmer to buy farm machinery.



### Food security in developing countries

In developing countries, farms are usually very small holdings. The farmer can often only produce enough food to feed his/her own family. The farmer **trades** any extra food produced on the farm to buy things like seeds for the farm and medicine for sick animals.



The land in developing countries is often very dry and not as **fertile** as Irish land. Farms in developing countries often do not have a lot of farm technology so they are unable to produce large quantities of food.

## How are farmers in the developing world affected by food insecurity?

On small family farms in developing countries, a bad **drought** or **flood** can destroy all the crops that the farmer grows. When this happens, the affected families must spend all their money on food. This can often mean that the farmer has no money left over to buy seeds, farm tools or animal medicines, or to send their children to school. The farmer may have to stop farming altogether as he/she may have no money to continue growing new crops or continue to farm whilst risking being unable to supply enough food for his/her family. This often leads to the farmer and his/her family falling into poverty and going hungry for periods of time, with little or no education.



### Suggested activities

- Photocopy the activity sheet on page 59
- Food Miles: get pupils to create a journey of their favourite food. Discuss the ingredients, where it starts and where it ends up and how it gets to our plate
- Discuss with students, all the things they do that uses energy each day at school and at home. Get each student to list these. Discuss with the students how important the foods we eat is in providing us with energy. This can be used to make a healthy eating template, for example, emphasising the importance of 'breakfast for brainpower' and other such healthy eating messages
- For extension material, see Modules 3 and 4

### Learning outcomes:

At the end of this lesson, students should understand the difference between farming in Ireland and farming in developing countries.

### Additional resources:

- [www.agriaware.ie](http://www.agriaware.ie)
- [www.agriculture.gov.ie](http://www.agriculture.gov.ie)



Developed in consultation with



An Roinn Talmhaíochta,  
Bia agus Mara  
Department of Agriculture,  
Food and the Marine

## The story of agriculture in Africa

Farming in Africa is tough. Hot climate, poor soils and small plots that must be farmed with very basic hand-tools make it difficult for families to make a living from the land. But they must, because more people in Africa depend on farming for their survival. Did you know that nearly 70% of people in Africa live on small farms?

**Gorta-Self Help Africa** is an Irish development charity that has been supporting African farmers for over half a century. Working in nine core countries, the charity applies a 'self-help' approach to its work – providing people with **skills, knowledge** and **practical** help – so that they can work their way out of poverty and build better lives for their families and communities.

Gorta-Self Help Africa helps farming families to grow more and earn more from the produce that they grow on their farms. This help includes supporting farmers so that they have good quality seed to plant, and different seed that will enable them to grow different crops.

The charity helps farmers to organise into producer organisations, in much the same way Irish farmers have joined with agricultural cooperatives in recent times. This has allowed small-scale farmers in Africa to work together, so that they can source new and profitable markets for their produce, and can organize better transport and storage for their produce.

Support is also provided to farming families to grow crops that are more nutritious and healthy, meaning that people have better quality food to eat, and are stronger and healthier as a result.

For further information, visit [www.selfhelpafrica.org/ie/](http://www.selfhelpafrica.org/ie/)

### Gorta supported interventions of nutritious foods including:

- Sweet potatoes, rich in Vitamin A
- High egg yielding poultry breeds
- High yielding disease resistant varieties of common beans
- High yielding disease resistant bananas
- High yielding and early maturing fruits including papaya, mango, oranges and passion fruit
- Milk, milk products and vegetables including amaranthus (a leaf vegetable), carrots, eggplants and spider weed (a leaf vegetable)

## Betty's Story

When Betty Adele was 14 she started keeping her own bees. She was given a beehive by her parents, and went to a local group that was being trained by Gorta-Self Help Africa, and was shown how to make her own beehive out of sticks, twine, and animal manure.

"I was afraid of bees, but my parents kept them. I have been stung many times, but it no longer bothers me like it used to. I do it because the honey that the bees make is good. I store it in plastic water bottles and sell it, and I also use it for my family," she says.

Betty and Patricia Adele from Bukadea in Central Uganda are using beekeeping to fund their education.

They are amongst 40 villagers in their parish who are being supported with apiculture (beekeeping) both as an income generating enterprise, and as a means of encouraging tree planting and natural resource management in their locality.

Betty, who is now 18, now has 15 of her own hives. She wants to finish Secondary School next year, and would like to get a job in an office after that.

At the end of last year Betty harvested 50 litres of honey from her hives, and sold this to a local trader for €2.80 per litre. She used the money to invest in some of her own equipment, and invested the remainder in clothing and books that she needed for school.



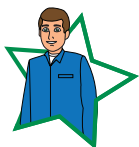
**Teacher guidelines:** After reading Betty's story, students should discuss what they have just read and talk about how it differs to their own life.

### Circle time discussion questions:

1. Would you like to keep bees?
2. How has Betty been able to afford to go to school?
3. How much does she earn from her work as a beekeeper?

Developed in consultation with:

**gorta**  
make hunger history



## The Irish farmer

Name: \_\_\_\_\_

Date: \_\_\_\_\_

### 1 Food comes from the farm. Some is sent to factories first to be made into other foods

Colour in the pictures and write in these missing words:  
(bread, farmer, factory)

<p>_____</p>	<p><b>grain</b></p>	<p>_____</p>	<p>_____</p>
--------------	---------------------	--------------	--------------

### 2 Match the words to the phrase:

- |        |  |
|--------|--|
| Vet    | The farmer puts these up to make sure no animals get in or out of the fields |
| Fences | Foods like fruit, vegetables and cereals grown on the farm                   |
| Crops  | The farmer calls this person if the animals are sick                         |



\*To be used with teacher guidelines, page 2

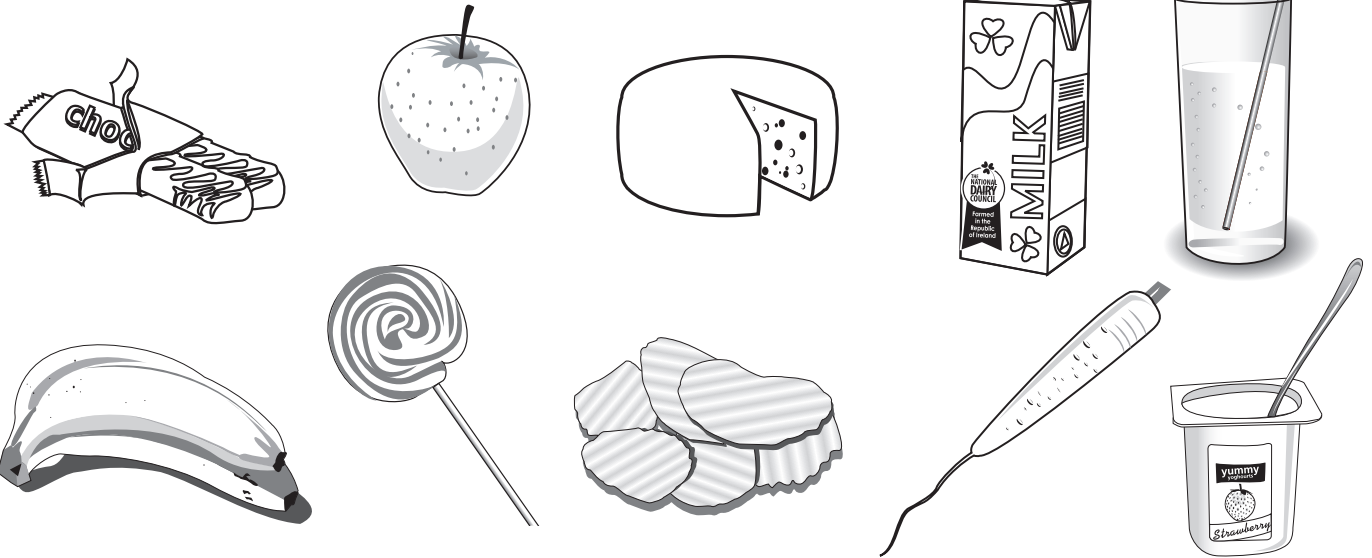


## Healthy eating

Name: \_\_\_\_\_

Date: \_\_\_\_\_

### 1 Colour the pictures. Circle the healthy snacks



### 2 Nearly all the food we eat comes from the farm. Colour in the pictures of these healthy foods and write what they come from underneath. Use the words below:

(chicken, grains, cow)



\_\_\_\_\_

\*To be used with teacher guidelines, page 4



## Cattle

Name: \_\_\_\_\_

Date: \_\_\_\_\_

1

**Use these words to fill the blanks:**  
grazing, beef, milk, tails, hooves

Cows feet are called \_\_\_\_\_.

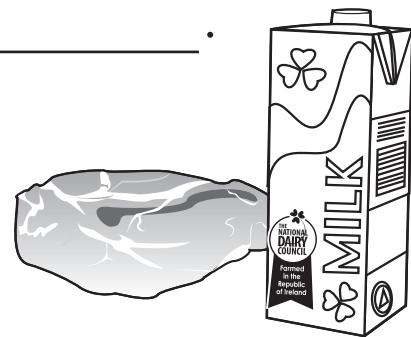
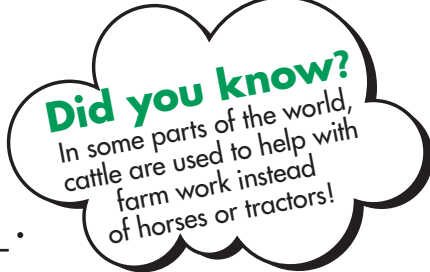
They use their \_\_\_\_\_ to flick away flies.

They eat grass. This is called \_\_\_\_\_.

We get meat from cattle.

This meat is called \_\_\_\_\_.

We get \_\_\_\_\_ from cattle too!



2

**Read the words. Draw the pictures:**

<b>Butter</b>	<b>Ice cream</b>	<b>Cheese</b>
---------------	------------------	---------------

3

**What are these three things made from?** \_\_\_\_\_

\* hint – this comes from dairy cows.

**\*To be used with teacher guidelines, page 6**



## Sheep

Name: \_\_\_\_\_

Date: \_\_\_\_\_

### 1 Help the sheepdog to put these words in the blanks:

lamb, flock, ewe, ram

Help me to put these words in the blanks:  
**lamb, flock, ewe, ram**



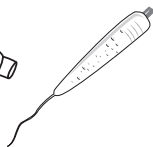
I am a male sheep, I am a \_\_\_\_\_

I am a female sheep, I am a \_\_\_\_\_

I am a young sheep, I am a \_\_\_\_\_

A group of sheep is called a \_\_\_\_\_

### 2 Circle the 4 things that come from sheep:



### 3 Use the words in the picture to fill in the blanks:

It is Summer.

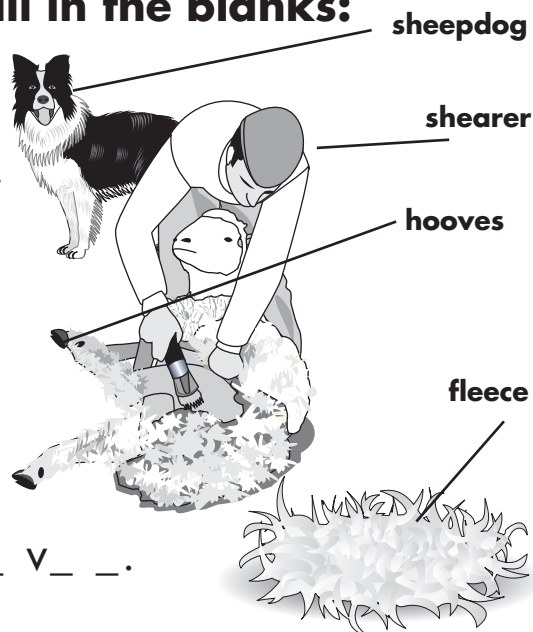
The s \_ \_ \_ r \_ r cuts the sheep's coat.

The sheep's coat is called a

f \_ \_ \_ c \_ .

The sh \_ \_ \_ d \_ \_ helps the farmer move the sheep.

The farmer must trim the sheep's h \_ \_ v \_ \_ .



\*To be used with teacher guidelines, page 8



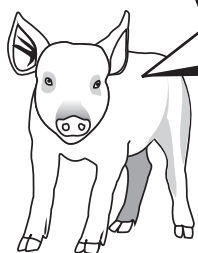


## Pigs

Name: \_\_\_\_\_

Date: \_\_\_\_\_

1



Help me to put these words in the right place:  
**piglet, ham, boar, litter, sow**

I am a male pig, I am a \_\_\_\_\_

I am a female pig, I am a \_\_\_\_\_

I am a young pig, I am a \_\_\_\_\_

A group of young pigs is a \_\_\_\_\_

We get \_\_\_\_\_ from pigs.

**Did you know?**

Pigs use their tails for swatting flies

2

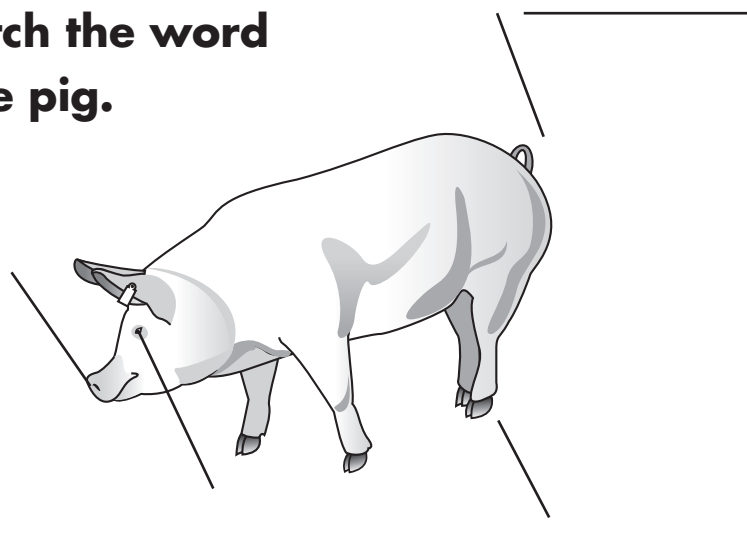
Look at the picture. Match the word to the correct part of the pig.

**Snout (Nose)**

**Tail**

**Eyes**

**Crubeen (Foot)**



\* To be used with teacher guidelines, page 10



## Poultry

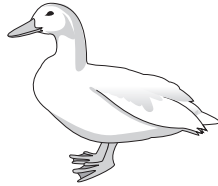
Name: \_\_\_\_\_

Date: \_\_\_\_\_

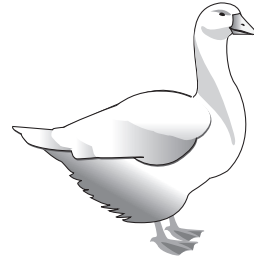
**1** Use the following words to label the poultry below: turkey, goose, duck, chicken



c \_\_\_\_\_



d \_\_\_\_\_



g \_\_\_\_\_

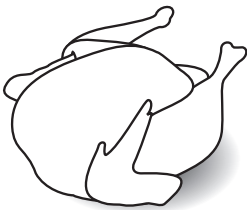


t \_\_\_\_\_

**2** Put these words in the right place – swim, food, claws, feet

Chickens and turkeys have \_ \_ \_ \_ . They use them for scratching the earth to find \_ \_ \_ \_ . Ducks and geese have webbed \_ \_ \_ \_ . These help them to \_ \_ \_ \_ .

**3** We get lots of things from poultry. Colour in the pictures below and match them to the right word.



Egg



Feather



Meat

\* To be used with teacher guidelines, page 12



## Cereals and grasses

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**1** The grasses we eat are called cereals. Match the cereals below with the product they make.

Wheat

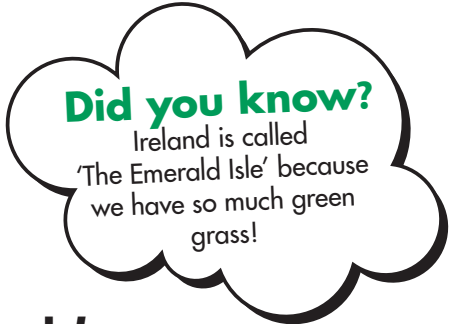
Malt vinegar

Barley

Porridge

Oats

Bread



**2** All cereals have an *ear*, a *stalk*, *grains* and *leaves*. Use these words to label the picture of wheat below.



**3** Draw one thing that can be made from wheat

\* To be used with teacher guidelines, page 14

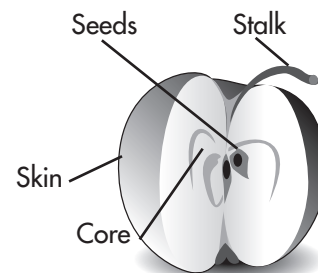


## Fruit and vegetables

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**1** Use these words to fill in the blanks  
 vegetables, apples, core, five, seeds, stalk



Fruit and \_\_\_\_\_ are very healthy foods. We should eat \_\_\_\_\_ portions of fruit and vegetables every day. \_\_\_\_\_ and strawberries are the main fruits grown in Ireland. The apple is attached to the tree by a s\_\_\_\_\_. The core holds the apple's \_\_\_\_\_.

**2** Potatoes grow under the ground. Draw 2 things that can be made from them:

<p>Potato plant</p>	<p>Potatoes are used to make:</p>
---------------------	-----------------------------------

\* To be used with teacher guidelines, page 16



### Farm and countryside safety

Name: \_\_\_\_\_

Date: \_\_\_\_\_

#### 1 Complete the story title

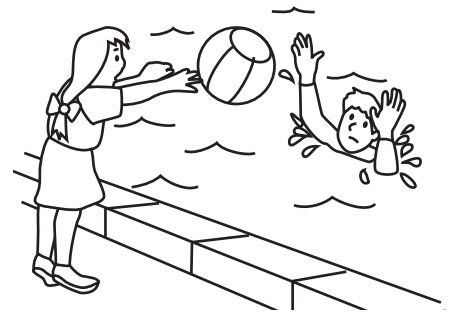
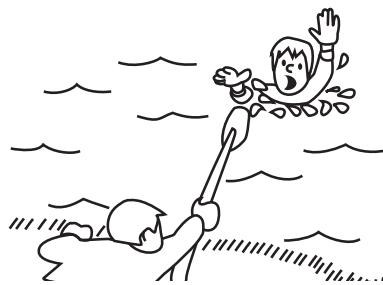
In the countryside I need to be careful around water because \_\_\_\_\_

#### 2 Write a sentence saying why these pictures are unsafe.



1.  
2.

#### 3 Colour in the picture below



If someone is drowning, don't jump in, help them. Stay calm and raise the alarm by calling out for help, find a telephone and dial 999. Try to reach them with a stick or throw them something that will float.

**\*To be used with teacher guidelines, page 18 and accompanying the Farm Safety DVD at the front of the pack!**

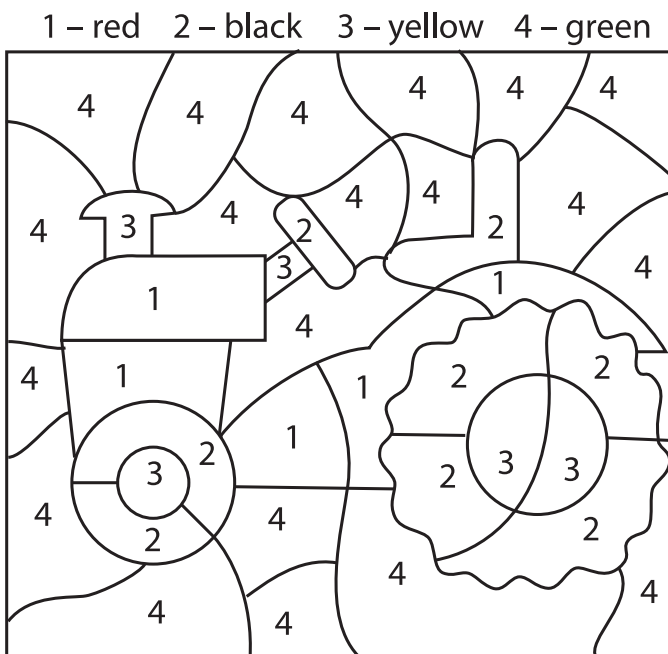


### Machinery safety

Name: \_\_\_\_\_

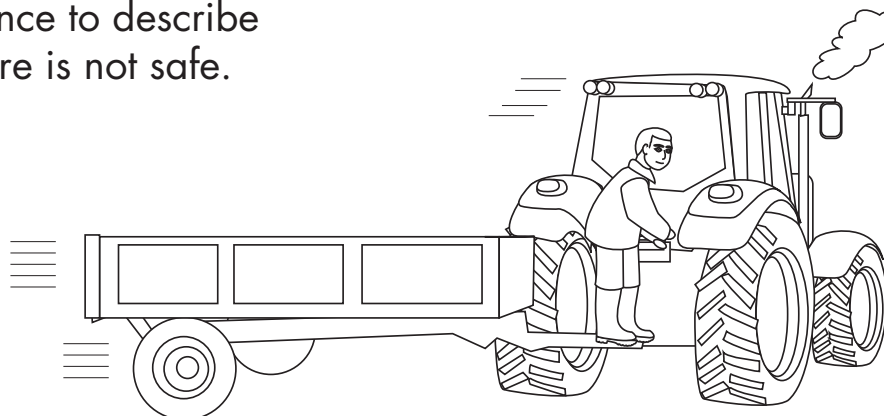
Date: \_\_\_\_\_

- 1** Colour in the picture to reveal a type of farm machinery



- 2** Tractors on farms can be dangerous

Write a sentence to describe why this picture is not safe.




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**\*To be used with teacher guidelines, page 20 and accompanying the Farm Safety DVD at the front of the pack!**

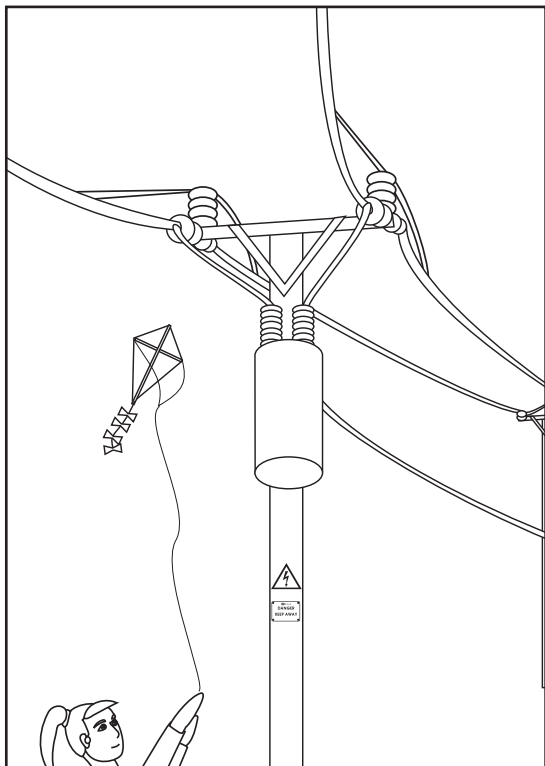


### Electrical safety

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**1** What is this person doing that is dangerous and why?



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**2** Draw one thing that uses electricity on the farm

Is this potentially dangerous?

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**\*To be used with teacher guidelines, page 22 and accompanying the Farm Safety DVD at the front of the pack!**



Energy for generations





## Farm animal safety

Name: \_\_\_\_\_

Date: \_\_\_\_\_

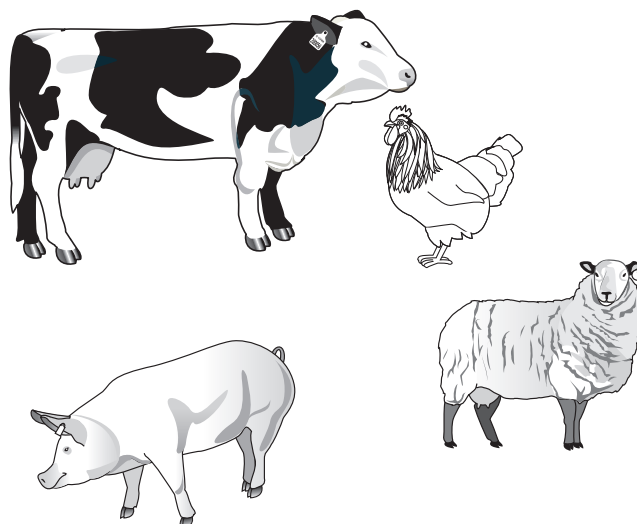
### 1 Write the correct word. Match the newborn to its mother

Pgteli \_\_\_\_\_

Lbma \_\_\_\_\_

Cfal \_\_\_\_\_

Ckhic \_\_\_\_\_



### 2 Join the words to make a sentence

Lambs are usually

New mothers can sometimes

Newborn pigs are

A lamb knows

it's mother by her bleat

called piglets

born in the spring

attack, kick, bite, or peck

### 3 Write True or False beside each sentence

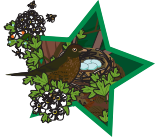
Sometimes the farmer will help an animal to give birth \_\_\_\_\_

We should approach animals when they are giving birth \_\_\_\_\_

New mothers are very protective of their young \_\_\_\_\_

**\*To be used with teacher guidelines, page 24 and accompanying the Farm Safety DVD at the front of the pack!**



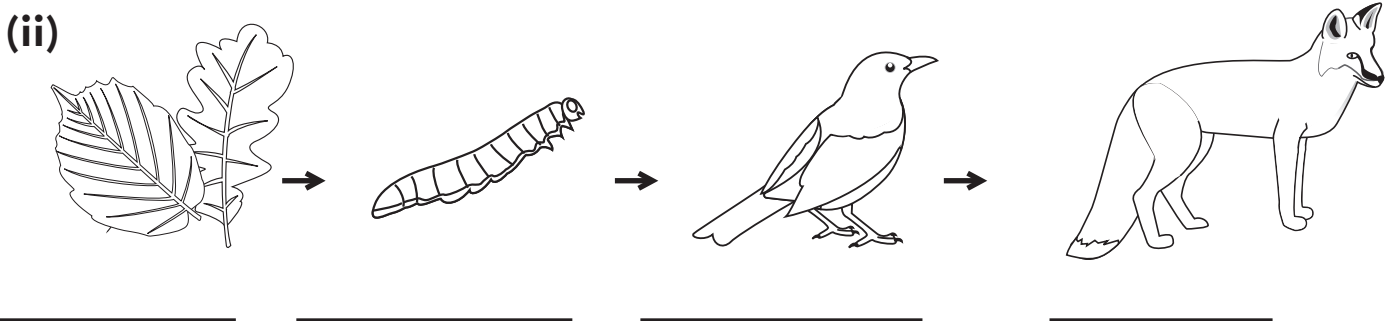
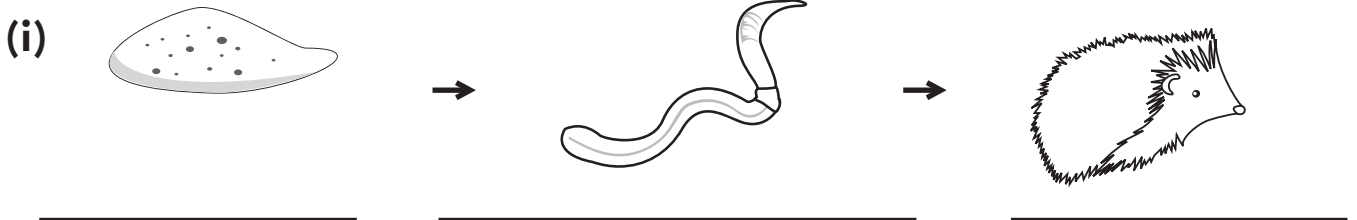


### The hedgerow

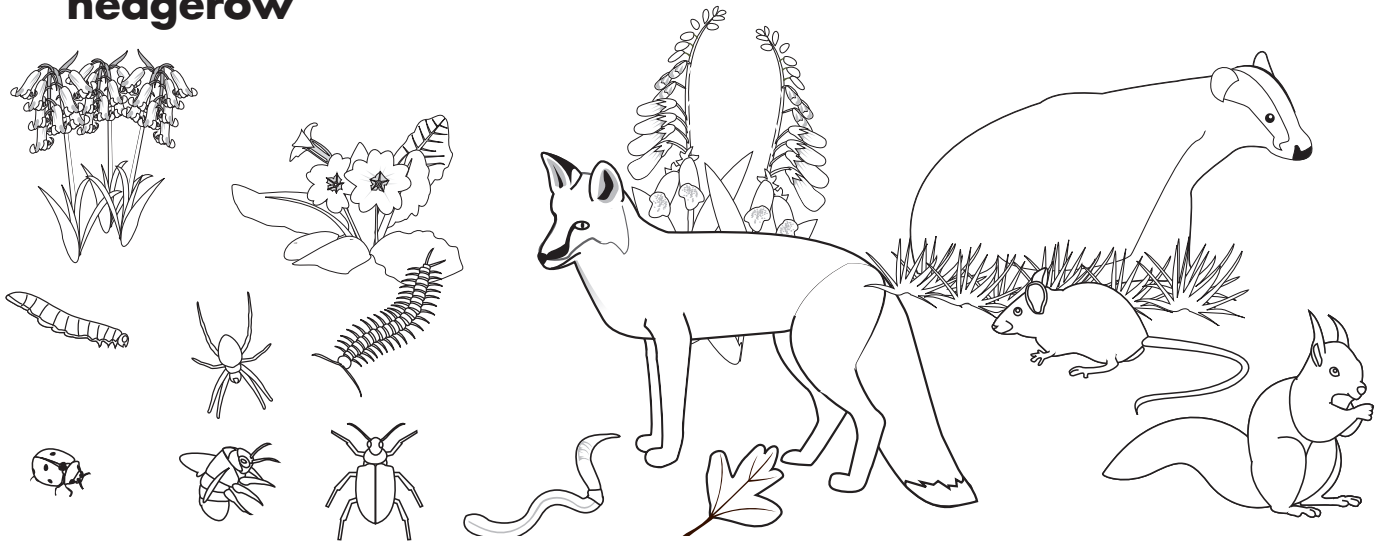
Name: \_\_\_\_\_

Date: \_\_\_\_\_

### 1 Label the different items in the food chains below



### 2 Colour the different plants and animals that live in a hedgerow



\*To be used with teacher guidelines, page 26

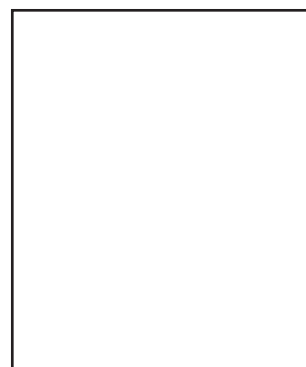
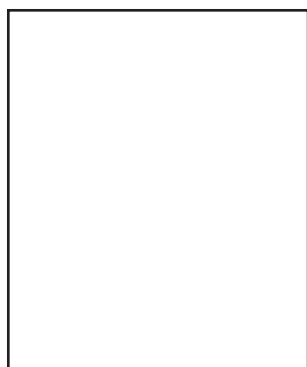
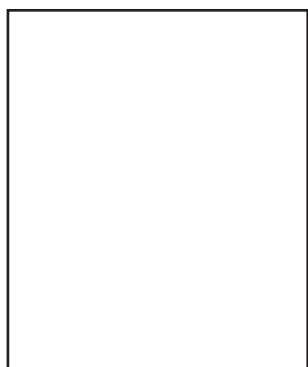


## Air and trees

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**1** Create a food chain – Draw and colour in the pictures



\_\_\_\_\_

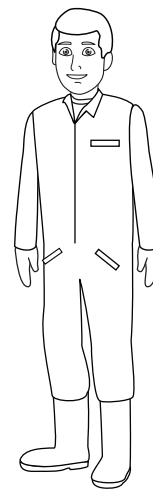
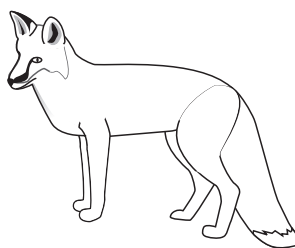
\_\_\_\_\_

\_\_\_\_\_

**2** Match the words to the picture

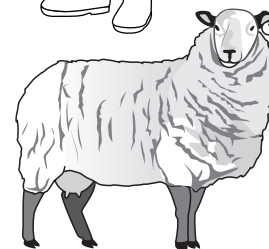
Draw and colour in the pictures

Herbivore



Omnivore

Carnivore



\*To be used with teacher guidelines, page 28

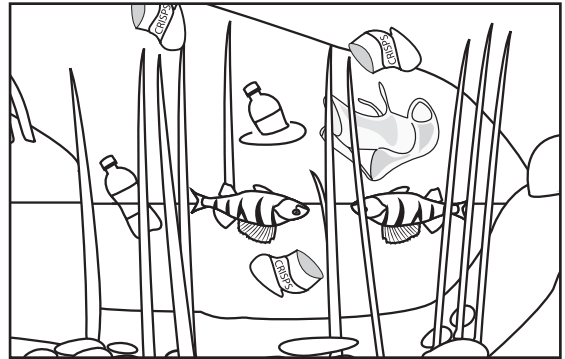


### Water

Name: \_\_\_\_\_

Date: \_\_\_\_\_

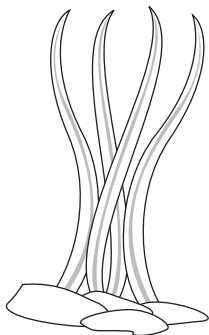
**1** Draw a clean river and a dirty river. Compare both pictures and why the dirty river might harm the environment.



Name these differences

\_\_\_\_\_

**2** Label and colour the food chain from the water



\_\_\_\_\_ → \_\_\_\_\_ → \_\_\_\_\_ → \_\_\_\_\_

\*To be used with teacher guidelines, page 30



## Soil

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**1 Use these words to fill in the blanks.**  
crops, Manure, Insects, trees

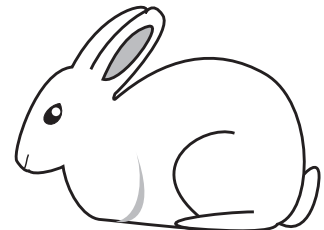
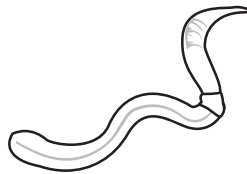
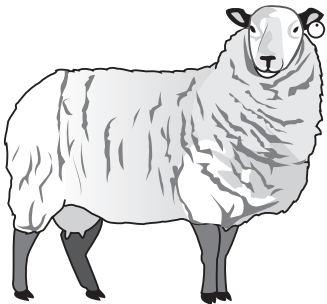
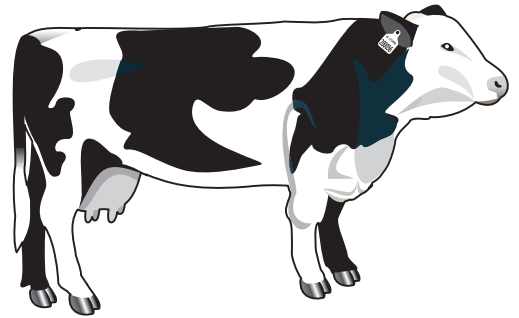
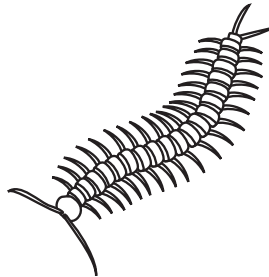
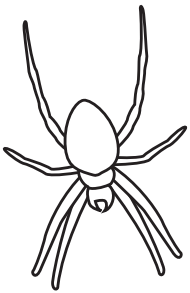
\_\_\_\_\_ live in the soil.

Roots of \_\_\_\_\_ are in the soil.

Healthy soil helps \_\_\_\_\_ to grow.

\_\_\_\_\_ is made up of animal waste.

**2 Circle the pictures to show what lives in the soil**



\*To be used with teacher guidelines, page 32

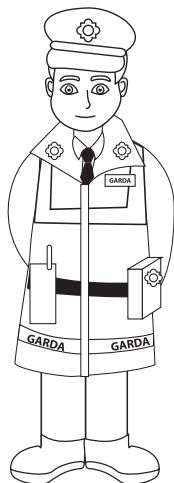


## Dig in to CAP!

Name: \_\_\_\_\_

Date: \_\_\_\_\_

### 1 Circle the people below who work with the farmer



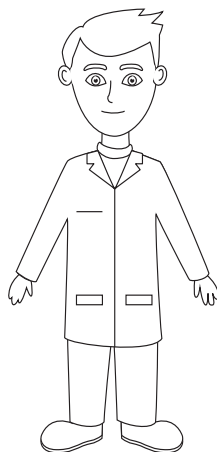
Garda



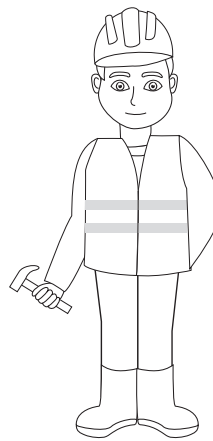
Teacher



Baker



Shopkeeper



Building contractor



Vet

### 2 Match the words to the phrase

Shopkeeper

Helps the farmer by building sheds to protect the animals from cold weather

Building contractor

Is an animal doctor who looks after animals, when they are unwell

Vet

Sells the food from farms which we buy and use to prepare meals at home

**\*To be used with teacher guidelines, page 34**

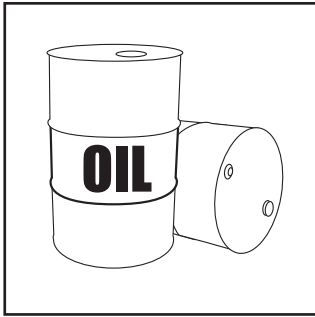


### Sustainability

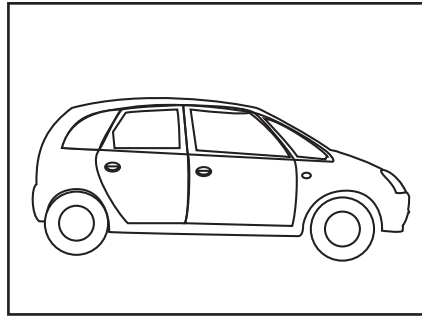
Name: \_\_\_\_\_

Date: \_\_\_\_\_

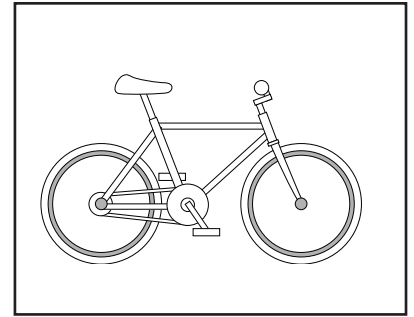
**1** Colour in the illustrations below showing how you can save energy in these paths



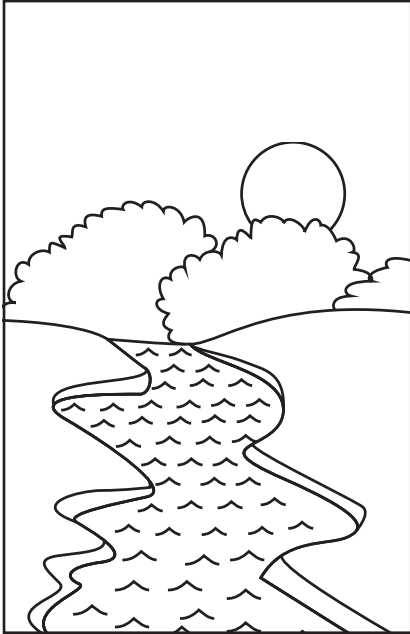
Fossil Fuel



Car



Bicycle



Water



Running tap



Brushing teeth with tap off

**\*To be used with teacher guidelines, page 36**

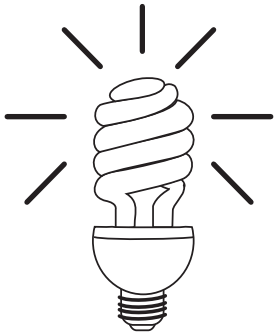


## Food security

Name: \_\_\_\_\_

Date: \_\_\_\_\_

### 1 Unscramble the following words



nEeryg

\_\_\_\_\_



aWtre

\_\_\_\_\_



raFrem

\_\_\_\_\_

### 2 Use the space below to draw a picture of your favourite food. Include a line on how it tastes and where it comes from

\_\_\_\_\_

\*To be used with teacher guidelines, page 38



AGRI AWARE



### Agri Aware's Founding Members



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