

# Safe Farm Futures

Senior

## Part 3: Moving Parts, Know Where to Start

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

# Part 3: Moving Parts, Know Where to Start

**Teacher instructions:** Work through the material below at your own pace. Moving Parts, Know Where to Start is all about understanding the role of different farm machinery and how to stay safe when we are in the countryside.

In the introduction to the programme, we explored the various types of farms and the jobs involved in caring for the animals and crops that provide us with the food we eat every day. Farmers use machines and equipment to help them with these jobs on the farm.

The most common machine used on the farm is a tractor. Tractors are used to pull other machinery and vehicles on the farm.

The lights help the driver to see when it is dark

## Beacon

Flashes an orange / amber colour to let other vehicles and people know its coming

## Cab

The farmer sits in the cab to operate the tractor,

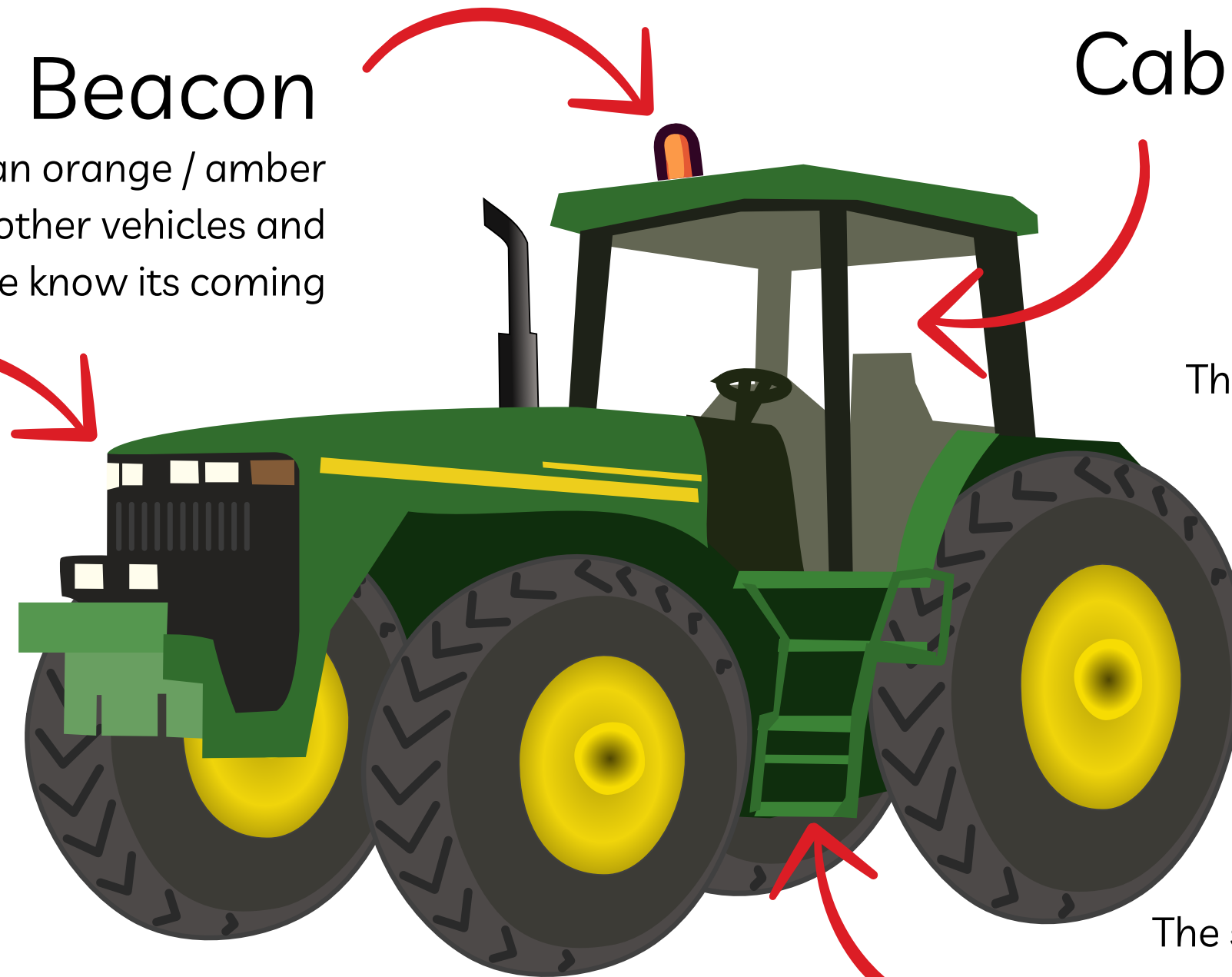
The wheels help the tractor to move.

## Lights

## Wheel

## Steps

The steps help the driver to step into the cab

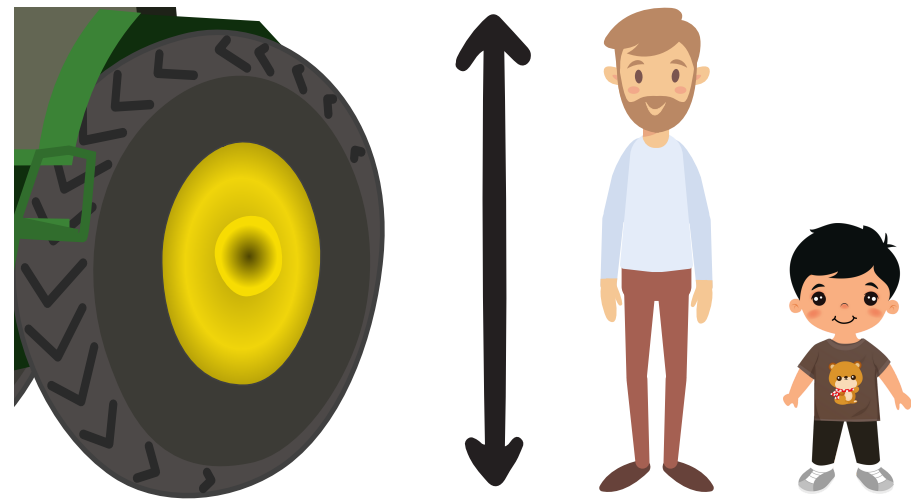


### Suggested Activities

- Take a look at the tractor image and the vocabulary associated with it. Discuss the purpose of each of the features with your classroom,

# Tractors Safety Tips for Children

**Did you know?** Children aged 7+ may ride in the cab of a tractor with a licenced adult only if there is a passenger seat and a seat belt fitted. Children can learn to drive a tractor from the age of 14, if they pass a state theory test.



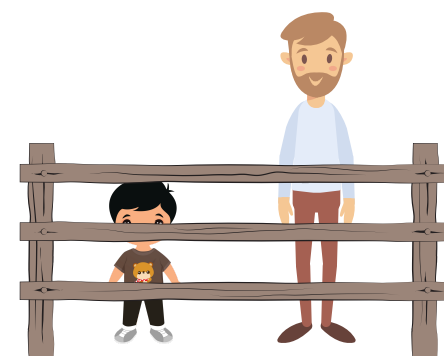
Tractors are massive machines, with wheels that are usually as large as an adult and twice the size of a child.

The farm is a busy workplace and is not safe for children. When you are on a farm, you should always play in a safe area, such as the house or garden that has a fence, and stay far away from farm machinery.

If farm machinery is approaching, you should check where it is coming from and step safely out of the way - ideally behind a fence or barrier.



Smile or wave at the farmer to make sure they can see you and wait where you are until they have passed by.

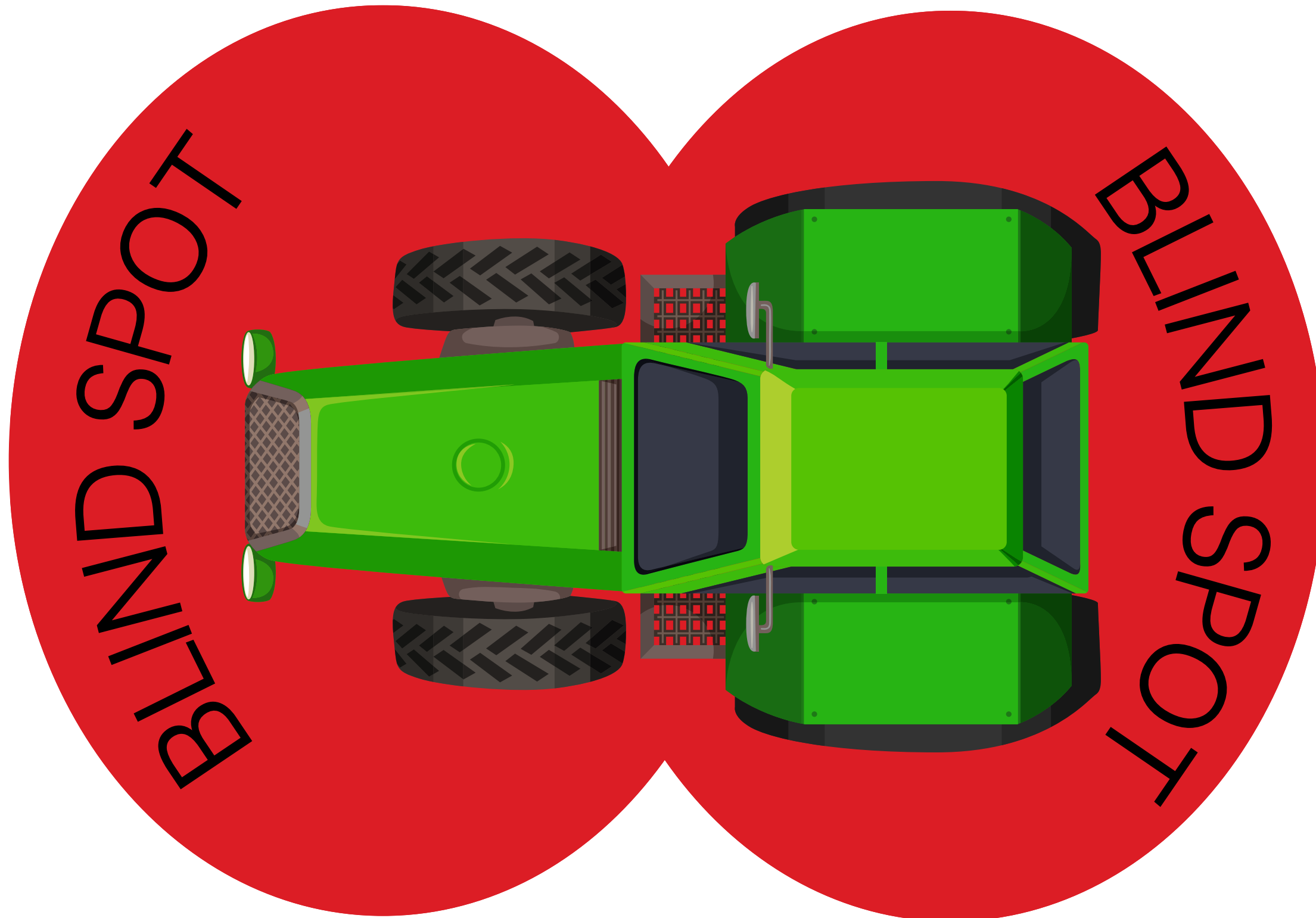


## Suggested Activity:

- Watch this video about staying safe around farm machinery.

 [Farm Machinery](#)

It's important to follow some basic safety guidelines when in close proximity to moving tractors. Remember the golden rule: always stay away from the tractor when it is moving.



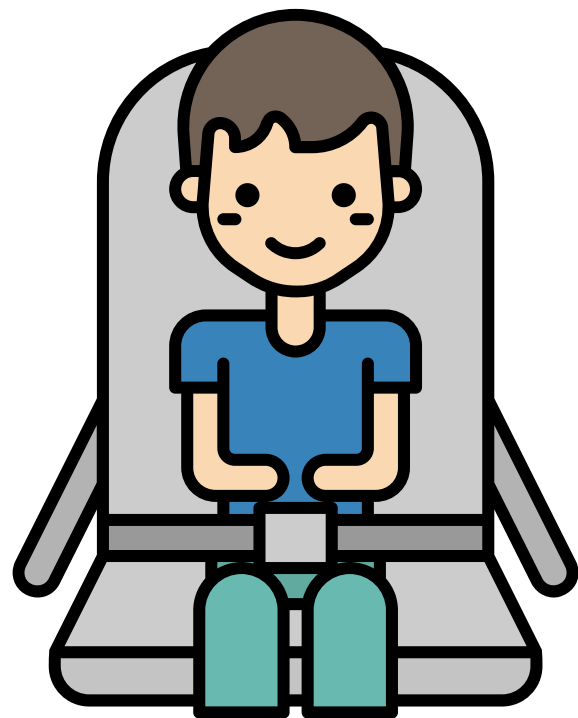
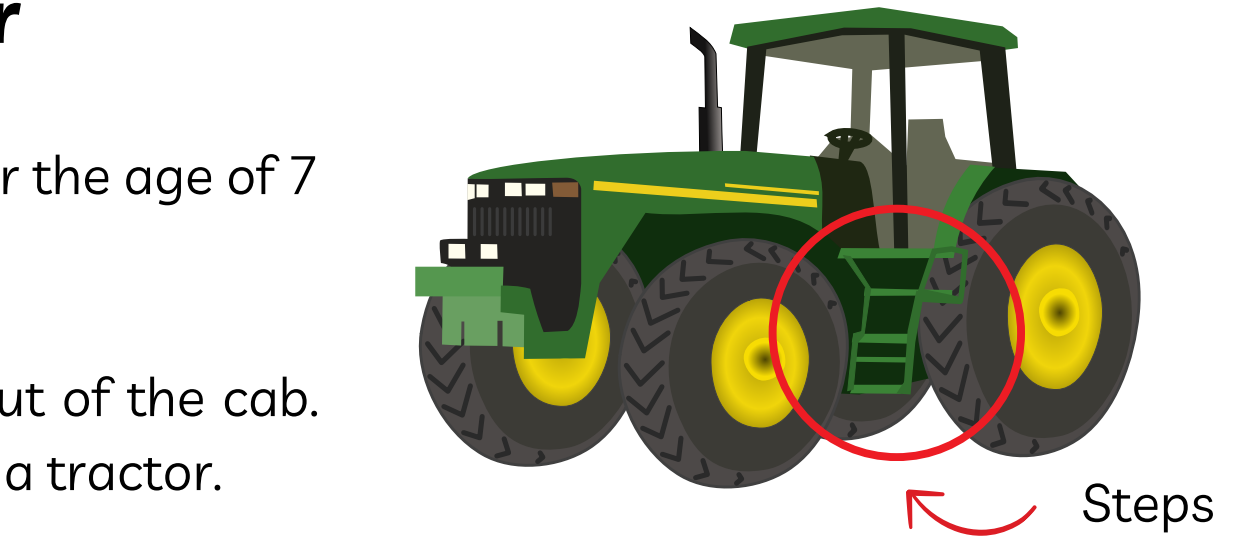
If children stand anywhere in the red zone outlined, the farmer will not be able to see them. This is the danger zone and the driver 'blind spot'. The best thing to do when a tractor is moving is to stay inside or stay in the farmhouse garden.

**Did you know?** If a child is under 7 years of age, they are not allowed to travel inside the cab of a tractor even if there is a passenger seat. Although riding in a tractor may seem like a fun idea, remember the farmer is at work and needs to have their full attention on the job at hand.

## Being a passenger in a tractor

In Ireland, there are rules about who can ride as a passenger in a tractor. Children under the age of 7 are not allowed to travel in a moving tractor.

Tractors are much bigger than cars. Steps are provided to help you to climb in and out of the cab. Take your time and make sure you face the tractor with both feet. Never jump on or off a tractor.



Once you are inside the tractor, make sure you stay seated at all times. There must be a seat with a seatbelt available for you. Never ride in a tractor if there is no extra seat with a seatbelt.

Tractors can be bumpy. This is why you should never stand up in a moving tractor. You can also hold on to any handrails to stay steady. Make sure to keep your hands and feet inside the tractor. Don't reach out or try to touch anything outside the tractor while it's moving.

**Always listen carefully to the driver's instructions!**

### Suggested Activity:

- Design an information poster showing all of the important things that people should know about travelling safely in a tractor. Make sure the design is clear and informs people of all the important safety points.



# The Power Take Off (PTO)

Many types of farm machinery can be attached to tractors. Each piece of machinery has an important job on the farm but can be dangerous. Remember, if you are under the age of seven - you cannot ride in a tractor!

A piece of equipment called a Power Take Off or PTO is used to connect a piece of machinery to the tractor. This equipment moves energy from the tractor into the machinery, making it move and carry out its required job.

The energy moves from the tractor into the PTO causing it to spin very fast. Every PTO should have a cover on it to prevent injury.

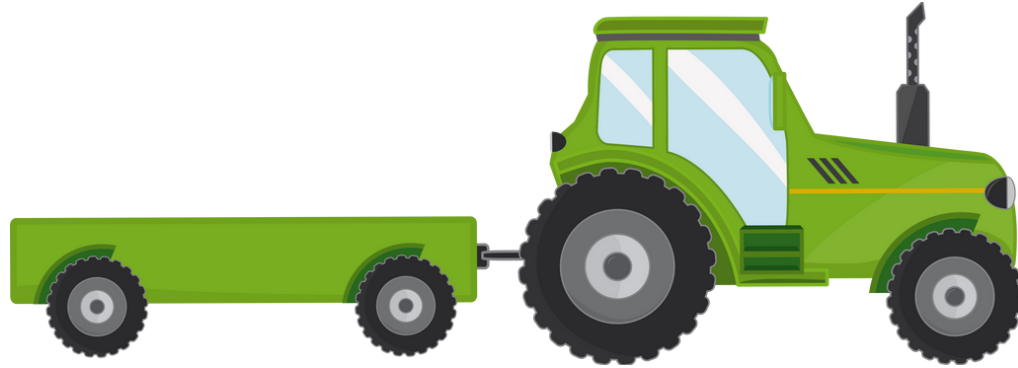
**Children should never touch a PTO with or without a guard.**



## Suggested Activities

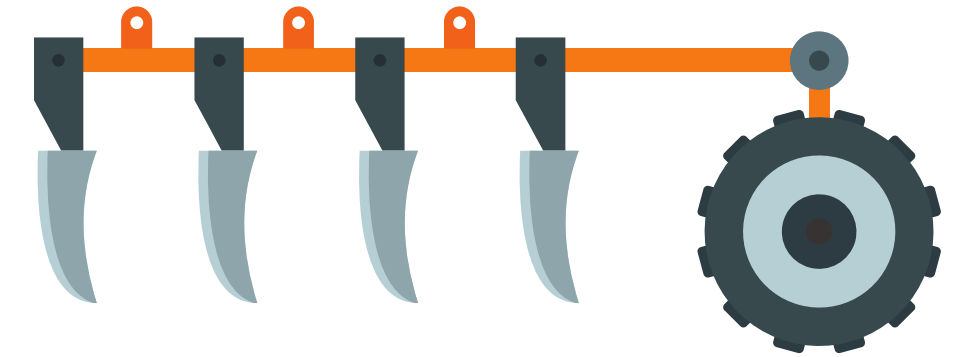
- Have a classroom discussion about the danger of PTOs.

## Types of Farm Machinery



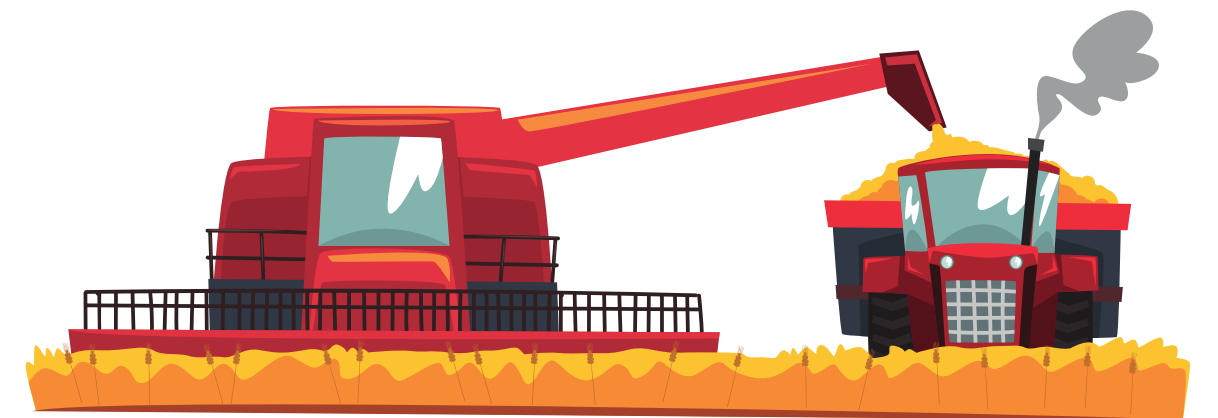
A trailer is an important piece of farm equipment that attaches to the tractor. It can be used to easily move lots of things from one place to another. Trailers come in all different sizes

A plough is a machine that farmers attach to the back of tractors. It helps to prepare the soil for growing plants. It has big pieces of metal on the back which dig deep into the ground, turning over the soil and getting it ready to plant seeds. The farmer can lift the plough up and down using the powerful tractor.



A baler is another machine that farmers attach to the back of tractors. Balers collect things like cut grass and hay and makes it into tight bales. Bales can be square or round. The bales make it easier for the farmer to move and store the hay or grass. This can be used during the winter months as food or bedding for animals.

Combine harvesters are one of the biggest and most important machines on a farm. They collect the crops when they are ready to harvest. They have big combs on the front that pull the crops in and sharp “teeth” which cut the crop just like scissors. When the combine is full, it can empty the crop into a trailer through a big pipe, just like the picture here.



Quad bikes are useful on the farm. The farmer can use a quad bike to drive in areas where there are no roads. Quad bikes should be used to carry out important jobs on the farm. They are heavy and powerful machines and should never be used for playing games.

## Important Quad Bike Rules:

1. Quad bikes are designed for one person only. Children or other passengers should never ride with another person on a quad bike.
2. It is recommended that only children aged 16 or older should use a quad bike.
3. The driver should always wear protective gear when driving a quad bike.



Strong gloves and boots are a good idea when driving a quad bike. This will protect the driver's hands and feet in the case of an accident.

A helmet is a very important safety measure when driving a quad. This will protect the driver's head in the case of an accident.

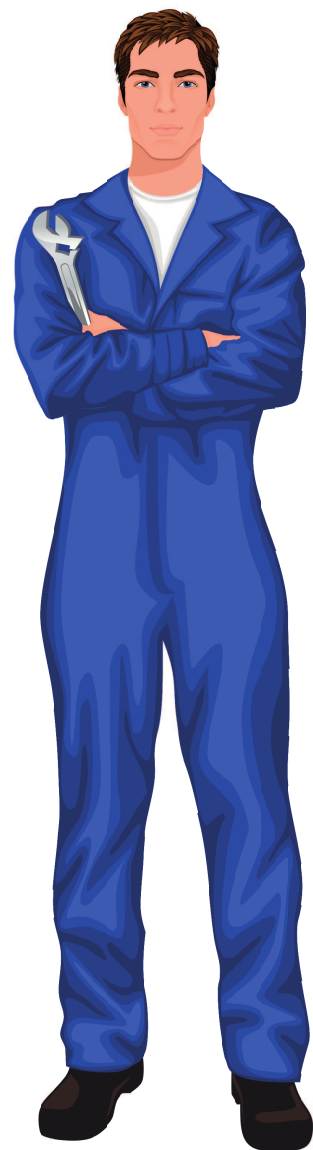




# What Should the Farmer Wear?

It is important that farmers and farm workers receive proper training on how to operate machine and equipment safely. They should also inspect the equipment before use to ensure that it's in good condition.

Farmers must follow all safety guidelines including wearing appropriate protective gear and avoiding distractions. The gear a farmer wears to stay safe is called Personal Protective Equipment, or PPE for short. Remember, farm machinery and equipment can help increase productivity on the farm, but safety should always come first. Children and pets must stay far away from the machinery and equipment when in use.



Farmers should have their arms and legs covered. Overalls are a good option.

Farmers must also wear wellies or other boots. Some wellies will have extra protection in the toes.



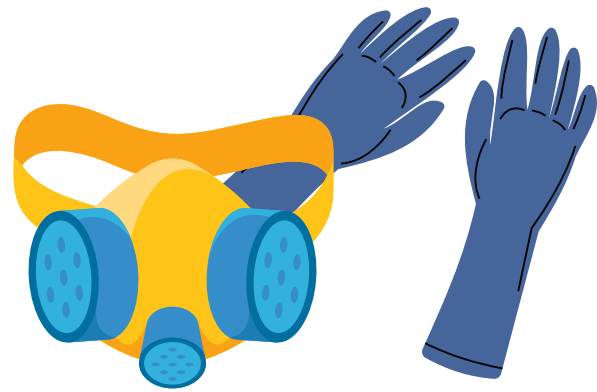
These headphones are not for listening to music. They help reduce the noise levels when farmers are working with loud machinery. They protect their ears from damage.



When farmers are working with chemicals, they must use special gloves and face masks. This will protect them from chemical burns.



When a farmer is using a chainsaw to cut up wood, they should wear the protective clothing, eyewear and special chainsaw gloves. These gloves can protect their hands from cuts.



Farmers use chemicals to protect their crops from insects, weeds, and diseases and to provide grass and crops with nutrients.

## Types of farm chemicals:

1. Insecticides
2. Herbicides
3. Fertilisers



## What do farm chemicals look like?

Liquid farm chemicals are often stored in containers. Solid farm chemicals can be stored in bags or drums. Some chemicals can be poisonous if we touch them or breathe in their fumes. They can make us sick or hurt us if we're not careful. Other chemicals can irritate our skin or eyes if we touch them. They might make us itch, burn, or even cause blisters.

A chemical store is a place on the farm where farmers keep different kinds of chemicals. This room should always be locked and have signs on the outside warning people of what is inside.

If you ever see something spilled or leaking from the chemical store, or if you smell strange smells, tell an adult right away. They can make sure everything is safe and clean it up if needed.



**Chemical store**



**Keep door locked shut**



**No smoking or naked lights**

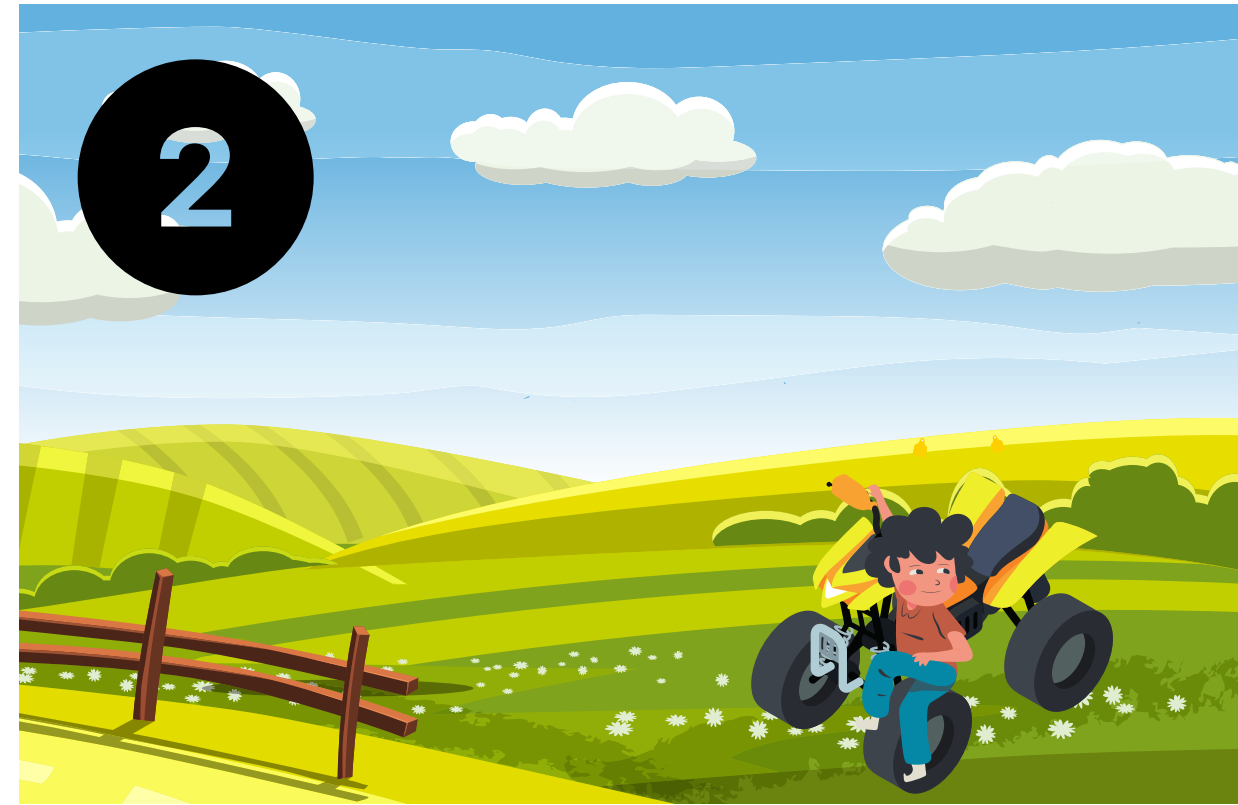


**No entry to unauthorised persons**

## Suggested Activity:

- Can you think of things that we use in our homes that need to be kept safe away from children?

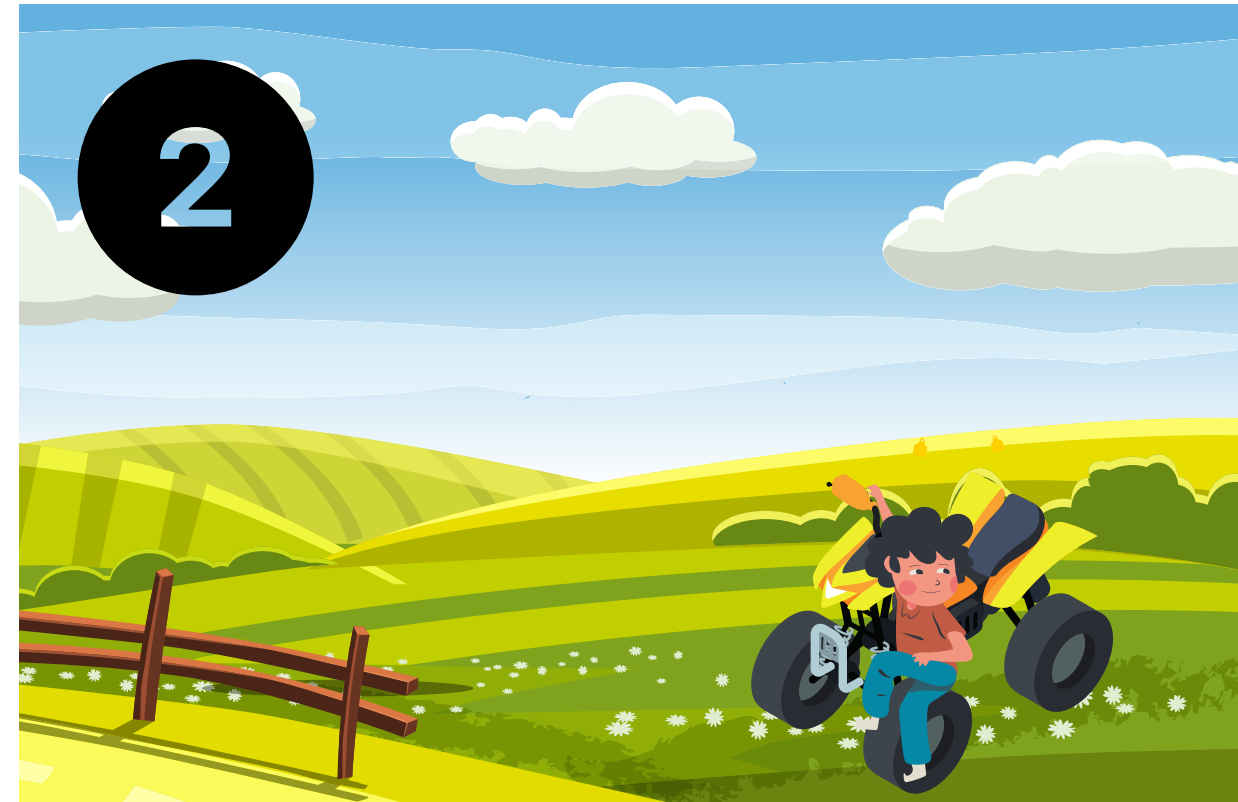
# Quiz - What's Going On And Is It Wrong?



# Quiz - What's Going On And Is It Wrong?



- There is a young child in the cab of the tractor.
- Children must be seven years old to ride in a tractor and they must wear a seatbelt.



- This child is playing near the quad bike.
- Quad bikes are not toys. They are vehicles the farmer uses for work.



- This farmer is not wearing any protective clothing.
- They need gloves, ear protectors and a face guard.



- These people are too close to a moving tractor.
- The child is not wearing a hi-visibility vest.