

Section 1

The Gnoll Country Park



(Source: Browne, no date)

Section 2

Chosen Features

- **The Pond** • **The Woodland** • **The Clouds**

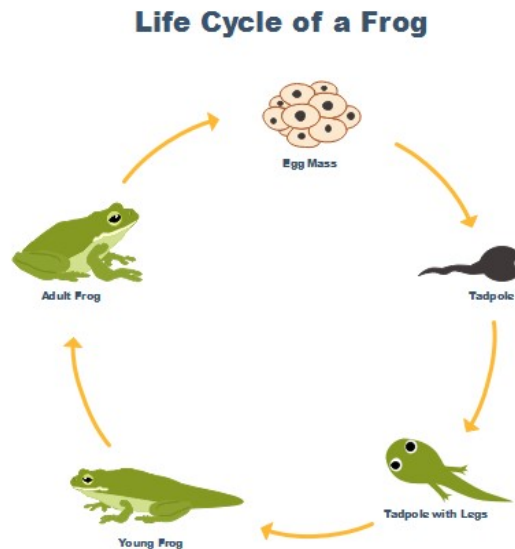
The Pond

The pond is the main feature of the above photograph, this is a place where wildlife can be discovered below the water's surface, where different creatures can be collected using nets and put in to trays ready to be explored further with resources such as magnifying glasses and microscopes. This will allow the children to discuss and identify the creatures by name and look at their colour, size, shape, and texture. Multiplication can also be used here to count and identify the number of specific groups of creatures collected and the data can be recorded in form of a simple tally chart. Differences such as big, small, long, and short can also be explored and discussions can take place on the volume of water collected by using words such as full, half full and empty. Questioning to increase the learning outcomes can take place such as - Will the creature's increase in size? What will happen when we put them back in the water? What do they like to eat?

Links to New Curriculum: -

- Collect and record data through investigation
- Make sets of objects together and categorise

- Recognise data through a variety of different methods
(Welsh Government, 2021)



(Source: Shepard M, 2020)

The life cycle of a frog is an exciting and fun way for children to learn science. Where the children can look for frog spawn and estimate the number of tadpoles that may be born, there might be tadpoles in the water that the children can collect, count, and investigate and look for further signs of growth and development such as the formation of legs. The children can look at the changes in colour, shape and size whilst measuring and recording growth, and watch them develop into froglets, before being released back into the wild to become frogs. The song 5 little speckled frogs can be introduced whereby number has meaning.

Links to New Curriculum: -

- Explore living things, life cycles and habitats
- Make observations and explore the outdoor environment
(Welsh Government, 2021)

The Woodland

As you can see in the photograph under section one, there are tree's all around the pond, most of this area is made up of woodland. The woodland is a perfect area for children to explore loose parts play where the children can gather an abundance of stones, pinecones, leaves, branches, twigs, logs, planks, plastic containers, tubes, and whatever other interesting objects they can find to count sort and

order and build large structures like the one illustrated in the picture below, where certain sticks of a certain length and size can be found to balance and construct the den, allowing the children to take part in open ended discussions and come up with solutions. The children may need to think about the weather and what things they might need to make the den watertight such as large leaves, hay or moss and estimate the number of materials that is needed for the job. They may discuss gravity for instance when things fall and have to be picked back up or use questioning such as What will happen if we add one more? What will happen if we change this object for something different? How can you balance these sticks to ensure the structure is sturdy? the list of learning possibilities in the woodland is endless.

Links to New Curriculum: -

- Choose different materials to use
- Select materials and tools for construction
- Communicate what I am making
- Understand differences such as equal and not equal
(Welsh Government, 2021)



(Source: Blue Forest, 2016)

There are sometimes designated barbeque areas in the woodland, the council have provided funding for such areas at the Gnoll country park (BBC News, 2020) Where fires can be lit to toast marshmallows, this will allow the children to choose, count, and sequence the colour and number of marshmallows they want to place on sticks and to look at the changes in consistency and the melting process. Prompting discussion on what will happen? How will the texture change?

Links to New Curriculum: -

- Count objects and sequence that I can touch and cannot touch

- Talk about different sets and how they change when added too or taken away (Welsh Government, 2021)



(Source: Graham D, no date)

Additionally, experiments can be completed such as making popcorn by using a tea light, tin, teaspoon of oil, popcorn kernels and a home-made tripod, like the one illustrated in the picture above. Where the children will learn how to construct a tripod by following directions of a diagram. The children will need to collect sticks of similar size and measurement where the children will learn how to lash and tie these together and use their senses to listen to the kernels popping and look at the science behind it. How did that happen? What did we do? What happened? How much have we made?

Links to New Curriculum: -

- Follow instructions and construct and control a device.
 - Question how things work and show curiosity.
- (Welsh Government, 2021)

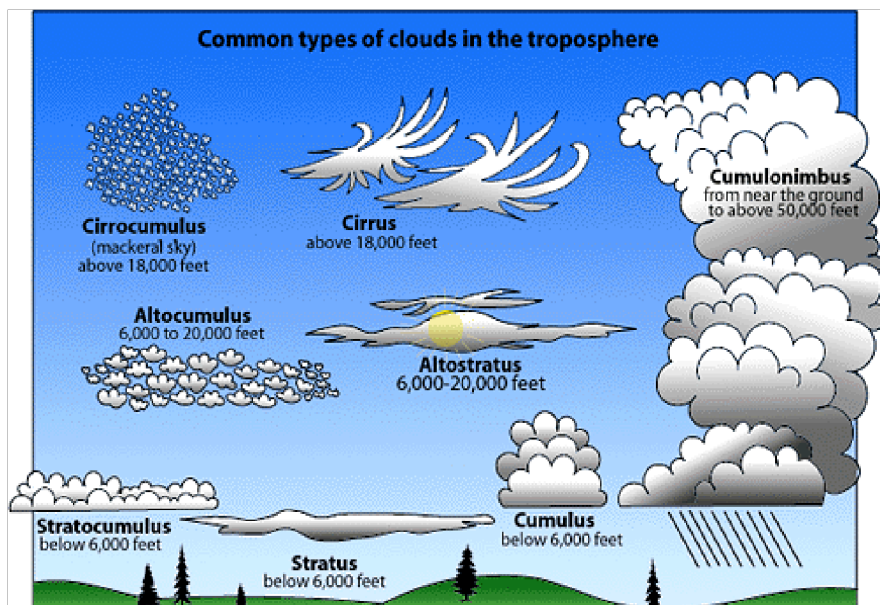
The clouds

The clouds are a prominent feature in the photograph and can be rather interesting for children learn about. This is where childcare practitioners can teach the children how the clouds are formed, which will allow them to learn about the water cycle, whereby water and ice travels up to the sky to form clouds, and when the clouds turn grey and heavy it rains, then the cycle starts all over again so water is constantly being recycled (Devereux, 2000). Following this the children can learn the names and shapes of the clouds as illustrated in the picture bellow, where they can identify the different groups of clouds and where they are placed in the atmosphere such as high, middle, or low. Shapes and pictures can sometimes be identified in the clouds by laying down and looking up at them, the children could draw the different clouds by identifying and estimating the length, size, and type of clouds they observe.

Clouds can also be constructed using cotton wool balls where art can be used to form pattern. Weather predictions can be made by the children allowing them to look at the climate change and decide if they think it will rain today. Rainwater could also be collected in containers and the children can measure the amount of rain fall collected over a few days, by using rulers or measuring jugs, and discussions can take place with regards to how light or heavy the container feels or if its full or empty and when the water is finished with, it can be used for pouring and tipping and to look at volume and weight. The clouds can also be observed in the pond this is an opportunity to enhance the concept and discuss reflections and what other reflections they can see in the water; Ice can also be explored as part of this topic.

Links to New Curriculum: -

- Use a variety of objects to measure
- Look at objects and identify sequences and patterns
- Choose materials for use
- Can make estimations such as heavier and lighter
- Talk about the influence forces have on objects and myself
(Welsh Government, 2021)



(Source: UCAR centre for science and education, 2021)