

Section 1 – Activity Plan

Activity Plan		
Activity: The Activity will be an outdoor activity, where the children will be going out onto the school yard to find different color and shaped leaves during the fall time and then create a picture for the numeracy wall in the classroom.		
Number of children: there will be a small group of 4 children in this activity.	Age of children: the children will be in the age range of 5.	Number of adults: there will be 1 adult working with these children.
Location: School yard, garden, and classroom.	Preparation time: 10 minutes.	Activity time: 1 hour.
Resources: the resources required will be. - Leaves - Felt tip pen - Ruler - Blocks - Worksheet - White board - Glue - Paint - Paintbrushes - Different color paper - A variety of colored Pens		
Aim/s of activity:		

The aim of the activity is to find as many different color and shaped leaves as possible and putting them into their groups of sizes this will Improve the child's Communication and their ability to use shapes to describe objects will enhance a child's ability to verbally communicate. The second part of the activity will develop creative skills and allow children to be independent.

Links to outcomes:

The outcome expected in this activity is for children to improve their counting skills as well as learning how to write the numbers out correctly. As well as the numeracy side of this activity, the children are expected to have a better understanding of simple welsh words such as colors, numbers, shapes, and sizes and learn how to be independent by being creative themselves and exploring the garden for leaves. but will be supervised.

Differentiation:

The differentiation will be based on the autumn. If a child is not liking the activity some changes could be made during the activity for the children reach their best abilities.

Health and safety:

It is particularly important to follow all policies and procedures in the workplace. It is important to check all area that children are in for things that should not be there for example animal facies in the school garden, any sharp stones or anything that should not be there and that would put the children in danger or at risk. In the classroom it is particularly important to look out for any sharp or pointy objects especially the material that you will be using so that the children are not put in any danger or at risk. It is important to carry out a risk assessment the beginning of everyday.

Role of adult/adults:

The adult's role in this activity is to support the children through the activity and ensure to help them, the adult can help the children by creating the activity to the child's needs, likes, and dislikes and supporting the children by asking them questions about the activity.

The activity:

To start of the activity the children will need to collect all their resources in the classroom, they will need a felt tip pen, a checklist (which will be provided by the teacher), a ruler and some blocks.

The children will then get ready to go outside to start the activity.

As the children get to the school garden the teacher will then explain the activity and the rules of the activity for the children to follow, the rules will be.

Find different colored leaves and to group them into two or more separate groups, one group will be for small leaves and the other group will be for big leaves.

The small group of leaves will be for leaves measuring under 5cm or 5 blocks.

The large group of leaves will be for leaves that measure over 5cm or more than 5 blocks.

The children should be able to measure them correctly and independently using both blocks and a ruler.

While looking for the leaves the children will also have a check list of different color leaves this will allow them to write the number of different color leaves that they find in the school garden or on the school yard for example. The colors on the check list will be.

Red

Green

Brown

Yellow

Orange

Here is the check list below.

Checklist

	☐		☐
	☐		☐
	☐		

The children should be able to identify the numbers and the correct unit of length. Centimeters will be used through this activity.

If the children finish the activity quicker than expected, they will be challenged with an additional group to find unusual shaped and colored leaves and to measure them and write the measurements down beside the leaves on a white board.

After the children have finished the activity, they will be asked to collect the leaves and bring them back to the classroom where another activity will be placed out ready for them, there will be glue, paint, paintbrushes, different color paper and a variety of colored pens.

The first thing the children should do after returning to the classroom is to wash their hands as they have been doing an outdoor activity.

They will then be asked to put an apron on independently.

The second activity will be a creative activity, but it will include numeracy skills.

The children will be asked to create an animal using different shaped and sized leaves and one other material for example paper to create eyes and a mouth.

Some examples will be given to the children of what they could create for example, a hedgehog or a lion.

During the activity, the children will be allowed to sing a song to do with mathematics for example “un Bys, Dau Bys, tri Bys Yn dawnsio” this will not only cover the mathematics development, but it will cover speech and language and the welsh language.

The art the children create will be displayed on the mathematics wall with a simple sentence beside their picture saying something like “I used 5 leaves to create this Lion” where the children must write the number in the sentence themselves and should be able to count the number of leaves, they used to create the picture.

After the activity, the children should wash their hands and then be allowed to choose a free classroom activity that are already set out for the children based on all areas of learning.

Section 2 - Evaluation

The most important thing to remember when creating activities for children is not to make it simple, the key is to make it as interesting as possible that way they will learn a lot more.

This activity is suitable for children within the foundation phase, the resources used are also suitable for the children to use, according to Froebel (1967) “the quality of the environment and the interactions within it are crucial. The child should experience nature 'in all its aspects – form, energy, substance, sound and colour'. Through gardening and play outdoors children have real, direct experience of the natural world” this also shows that Froebel would agree that this activity is suitable as it is also taking place outdoors as well as using energy and colour.

According to gov.wales (2008) and within the numeracy framework learners in the foundation phase should transfer mathematical skills to play and classroom activities. During this activity, the children will be able to organise the leaves. The context of the activity will be that the children will be asked to organise the leaves into two or more groups, one group will be small leaves and another group will be for big leaves and an additional group for unusual shaped and colour leaves, this will also allow the children to match the colour of the leaves to their check lists provided by the classroom teacher. They children were told that small leaves could be classified as 5cm and under and the big leaves are classified as 5cm and over.

During any task it is particularly important to ask children questions as they go along because it helps the children explore for the answers. It has also been said by Maria “they feel motivated to exercise their sense of agency and build their independence skills.” They should also identify steps to complete the task or reach a solution again sorting materials is a great activity to identify this. It is important to ensure that select appropriate mathematics and techniques are selected to use as well as selecting and using relevant number facts and mental strategies. It is also particularly important to select appropriate equipment and resources, choosing leaves as a natural resource will support colour, shape, and size. also, it is important to use knowledge and practical experience. It is important to make the activity as fun as possible for the children, making rules up will also support children as they become aware of knowing that they must follow rules and directions as rules are a big part of mathematics and numeracy. This activity had been made as fun as possible where it also always children to be creative by creating a picture with the resources that they have collected and develop other skills such as speech and language and the welsh language by singing and understanding or the world by picking autumn leaves.

It is also important that staff bring numeracy to whatever game the children are playing and the welsh language using simple phrases like “un, dau, tri” at the start of the activity as it is a great way of supporting the welsh language and of course numeracy. The activity could also support the welsh language by using the welsh colors such as ‘ coch,gwyrdd,melyn,brown a oren” to identify the leaves and it could also be supported by identifying the size of the leaves by sing words like “bach a mawr.” The activity above does support the numeracy framework but a few adjustments could be made to support it a little more. One adjustment that can be made is to create a theme, this activity is taking place during the autumn and the creative activity of it is based on animals where as it could just stick to one maybe do a theme on animals for example zoo animals or farm animals or it could even be creating a Halloween picture out of leaves to represent autumn.

Section 3 – Discussion

There are many great resources to support children during numeracy activities for example in this activity plan we have included an open ended resource which of course are blocks, blocks are a great way for children to measure things. The meaning of Open ended is that the children get to play with the resource but also learn from them at the same time. Mud kitchens are also a great open ended resource as it allows the children to play with many things such as saucepans, spoons there may be something that allows them to measure things, timers to see how long they are “cooking for”. It also allows children to be creative which is great within the curriculum.

Natural resources are also great to use during activities, in this activity we have decided to use leaves as a natural resource, leaves can also help children to be creative and give them ideas what to do with them, by using natural resources also gives children a ‘curiosity approach’.

The learning environment is also very important, it has been said by early years matter() that “the environment plays key role in supporting and extending children's development and learning. Enabling environments encourage babies and young children to play because they feel relaxed, comfortable and 'at home' in them.” The most common environments are in the classroom and outdoors. This activity is based on both in and out of the classroom.

Doing activities outdoors improves many things for children including their overall health that's why it is encouraged by play wales (2021) their words are “Playing is central to children’s physical, mental, social and emotional health and wellbeing” this means that if children play their physical, Mental, social and emotional health and wellbeing are much healthier, if the child overall health is good it will give them more of a stable ability and will allow them to focus more on the activity. Froebel (1892) recognized the value of adventurous play outdoors he believed that people should look at the benefits of such challenging activities rather than focus on risks.

One of the main things that should always be remembered while teaching children mathematics is that both boys and girls should get treated equally as of an old myth about the math abilities of boys and girls. There is no such thing as boys being better than girls at mathematics, it is down to the way the children get taught, if the children are having fun they will be more than happy to learn, if they find something boring they are not going to want to learn therefore that's why it's very important that it is made to be fun for children so that the best come out in them.

How can mathematics be made interesting? Maths is everything that little children need to know, like no other subject mathematics as there is always a correct answer, solving problems to encourage children to become confident to answer questions. Active learning is a great way for children to learn, active learning means hands on learning where children get the experience to do things such as;

Sorting Colors with Bears -Sorting is a skill preschoolers should work on a lot. One way to sort is by color. We do this with our counting bears and a sorting mat.

Graphing – it is always good to introduce to preschoolers. It doesn't have to be complex, but you can do a simple activity like graphing the types of transportation on a bar graph and use small pictures or toys.

Theorist Dewey (2017) stressed the value of outdoor education and hands-on and experiential learning. It has been proved that children learn more by doing things.

Section 4 - Framework

Working with the framework of the foundation phase, the adults role is to see where the child is at in their development, they will do this in a simple way by assessing them, before assessing a child it is very important that you know the child for example their dislikes and likes, their background, culture this way the activity can be created to the likes and needs of the child so that it makes the child feel as comfortable as possible while getting assessed, by the child knowing who you are also gives them courage to be their self and that's when we see the best in the children and that's what we want during assessing a child.

Vygotsky (1978) suggested that to truly understand a child's level of development and ability, one must measure not only what the child can achieve independently, but also what the child can achieve under the guidance of a peer, because children's development used in which the goal is to determine skills. It is very important that children have a good understand of mathematics.

According to EYFS(2012) the following skills support children to solve problems, use money and calculate more or less. Shape, Space and Measure - these skills support children to understand size, weight, capacity, position, distance, time and money and compare quantities, objects and solve problems. The adults role is to then create an activity to fit in with this curriculum. There are many great

activities that include the list above that also include play for example money, the activity could be playing shop where the children have to learn to give change and calculate money which also teaches them another unit of measurements. The activity plan created above includes shapes and sizes. Another great activity is to get children to weigh objects in the classroom for example get them to find two yellow things in the classroom so that you are including colors as well and then get them to find out which one weighs more and which one weighs less by using the balance weighing scales.

It is important that the classroom teacher shares ideas with the parent/career of the child because Regularly sharing work samples with parents enables them to get a better appreciation of their child's progress and makes them feel comfortable with you which is very important as they must trust you to leave their child in your care. It also allows them to know the child's strengths and weaknesses therefore they can work together to make improvements such as maybe a child doesn't like something particular about the activity for example they may not like teddy bears and the activity is based on counting teddies, but maybe the child loves football so it is the adults role to ensure that the child is happy, by changing it to counting footballs may encourage the child to count. Little things like that can help a child to like the activity and by liking the activity, it will give the child the ability to learn a lot more.

It is known that mathematical resources are most successful when they are themed and meaningful to the child, however there are a few essential resources that satisfy basic requirements such as weighing apparatus – bucket balance scales, rulers abs tape measures, jugs and scoops of varied sizes.

It has also been said by Tucker (2016) that Numerals should be prominently and purposefully displayed and that number tracks should also be used that's why it is the adults role to ensure that children get give number tracks, a number track represents natural counting number and number lines offering possibilities for representing numbers between natural numbers, here are some examples that can guide adults to use number tracks, the first one is a supply tactile number cards made out of rough fabric, sandpaper, rope etc. and number marble runs. The second example is an area providing areas tin the environment that can count interesting and alethic objects and label them with corresponding numeral. The third example provides opportunities for children to see numerals alongside the written word and corresponding array. The next example give is a display of numbers in a purpose contest which has been included in this activity plan (children's pictures to go on the numeracy wall). It is also suggested that the number lines, both numbered and empty, and readily available for children to refer to and write independently. It is also very important that adults display big numbers including hundred square, prominently. Made numbered games readily available is also very helpful which has also been included in the activity plan as the children will be allowed to go to do a freely chosen activity after they have completed the task that they have been provided with, there will be more than one freely chosen activity for the children to choose from in the classroom. There should also be books that display numbers even if the teacher reads a book on the three little bears, it still includes numbers and it is important for the

teacher to ask the children numeracy questions after reading the book for example they could ask the children “how many bowls of porridge did goldilocks try?”.

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