

Activity Plan		
Activities: Arranging the leaves with numbers 0-10 on in order independently, be able to identify numicons from 1-10 independently therefore the children will be able to match the correct amount of numicons with correct number on the leaves and being able to identify what number will come next within the group activity.		
Number of children: 15	Age of children: 3 and 4	Number of adults: 3
Location: Classroom	Preparation time: Part 1 & 2: 30 minutes Part 3: 30 minutes	Activity time: Part 1: 15-20 minutes Part 2: 15-20 minutes Part 3: 15-20 minutes
Resources: Will need to have access to the internet, a laptop/computer to be able to find clipart pictures of different shaped and colours leaves with numbers 0-10 on, paper to be able to print the leaves out, printer to be able to print the leaves out, laminator to laminate the leaves, scissors to cut around the leaves and numicons 1-10		
Aim/s of activities: The aims of the activities are for the children to be able to count from 0-10 independently or to their best ability, the child will learn to match the correct amount of numicons with the correct number of the leaves and the group task the children will need to identify when their number on the leaf will come next.		
Links to outcomes: At the end of the activity the children should be more aware of numbers, be able to count from 0-10 or to their best ability and to be able to identify numbers with the correct quantity.		
Differentiation: A different method of doing the activity would be to take the children outside in a group for them to be able to collect the leaves, this would allow the children to count the leaves when collecting to ensure that they have collected the right number of		

leaves to carry out the activity, allowing the children to collect their own leaves would lead the activity to be less adult led.

Health and safety:

Leaves will need to be cut correctly to ensure that the leaves are not sharp around the edges, the adults should also be aware when children are handling numicons to ensure that the children are not placing the items in their mouth.

Role of adult/adults:

The role of the adult will be to identify what stage the children are at with their mathematical learning and how they are able to support the children's development further, to help the children to be able to count from 0-10 and helps them understand how numbers fit together.

The activities:

The 15 children will be split up into groups of 5 with the 3 adults. In the first activity the leaves that have been printed, laminated and cut out with the numbers 0-10 will be placed onto the table, the children will be asked individually to arrange the leaves in order from 0-10 or to their best ability by themselves, the adults will be able to support the children by helping them count from 0-10 with the children so that when the children are unsure what number will come next this will help them to pick out the leaf with the number that the adult has repeated what the following number is, the adult will need to take note on how much support the children need during the activity as this will help the to identify what stage the child is at. The second activity the leaves that have also been printed, laminated and cut out will also be placed onto the table where the children will need to arrange the leaves from 0-10 identical to the first activity and the same support would be given for the children to reach 0-10, there will also be numicons set out on the table for this activity where the children will need to match the correct amount of numicons to the correct number on the leaves for an example, If the number on the leaf is one the child will need to place to numicon that represents the number one and so on, the adults can support the children by helping the child count from 0-10 if they are having difficulty by also repeating the number that follows after the number that they are finding difficult to move passed, when the child has the leaves in order they will be able to start placing the correct numicons onto the correct leaves, if the child needs support the adult will be able to show the children that we count how many circles the numicon has as this will be the number of numicon that it represents. The third activity the children will be working in a group, each child will be given two random numbers that will be handed out by the adult who is taking the activity, the adult will place the leaf with the number 0 on in the centre of the table to start the activity, the children will be asked to place the number that follows 0 down on the table, the children will have to look at the leaves that they have been given to add on to the number on the table and so on, the adult would be able to support the children by asking them to look at the number on the table and ask what number follows if the children are unable to recognize what number comes next the adult would be able to say the number that comes next.

Part 2

According to Amsl children learning independently or working together in a group task can offer great value. A child learning individually will allow the children to develop on their order of thinking skills such as, problem solving, reasoning and allowing the children being pushed outside of their zone of proximal development. Allowing the children to work as a part of a group in a mathematical activity, will allow the children to develop on their sharing and discussing ideas and would be less of an adult structured activity as the children would come out with the outcome and solving the problem together as a group. Amsl suggests that children have difficulty learning numbers and understand the concept of numbers, numicons are used in schools to help children understand numbers when learning mathematics. The website also states that the numicons slots into the mathematic mastery, the numicons are multi-sensory objects that are made out of plastic with holes that can be used in playdough, water or sand. Each numicon represents a number and has a different colour which helps learning as the children will be able to identify the numicon by the colour, the children will begin to use the names of the numbers once they become more confident. The Welsh Assembly Government (2008) states that children that experience sensory play will gain a better understanding of concepts. By the children repeating the activity they will develop sequences and similarities. According to the Welsh Assembly Government (2008) children aged 3-7 years old are entitled to educational play and active learning, which is essential for children. The Welsh Assembly Government (2008) also believes that allowing children to undertake play and have an active learning indoors and outdoors will have a positive impact on their development, along with the children understanding the world around them and number skills, which in Wales the Skills framework promotes thinking skills, communication, ICT and number skills for children from 3 – 19 years-old. NAEYC (2010) believes that it is crucial for children to become confident when learning and using mathematics, the children will develop skills such as interest, inventiveness, determination and flexibility that will result in helping the children prepare for their further learning in school and for their everyday living outside school. NAEYC (2010) insinuates that during play activities and day to day living children will examine mathematics, this could be by the child becoming more aware of different shapes and sequences or perhaps comparing the different values while taking part in the activity. Practitioners should allow the children to have plenty of time while they are processing the task. Practitioners can support children in the activities and their learning by including what the children are already aware of therefore practitioners are able to build up children's mathematical representing, reasoning and many more mathematical skills while supporting the

children to stay on task. Tucker (2014) states that the environment the children learn and take part in the activities will play a role in the development of the children as self-regulated learners. A positive environment that allows risky play activities and independent play will allow the children to develop on their agency and efficacy. Tucker (2014) reflects on the physical environment which includes the correct and suitable equipment for the particular activity that will support the children to stay focus, practitioners should let the activity take place in a large environment and allow enough time for the activity to play out. Piaget (2019) had a passion on learning about how children think and how they learn, Piaget (2019) believed that Children's learning proceeds through the environment that the children are learning through their interactions as well as the children using their knowledge from their experiences. According to Lesile (2016) play activities in the classroom can help children to improve in subjects such as mathematics as well as exploring social and academic skills.

Part 3

Tucker (2014) states that resources that reason with the mathematical activity and interests the children tend to be more successful. When choosing the resources that will be used practitioners should take into account those that are artistic and eye-catching that will engage the children whilst providing links to the activity. Tucker (2014) suggests in mathematical activities practitioners will be able to use the following resources when children are problem solving in counting, classifying, pattern arrangement, different formats of shapes and quantity these resources may be leaves, wood, wool, acorns, conkers, pasta and many more. The website Kingsley Montessori (No Date) states that including Montessori mathematical resources assist children in the visual, physical, and active learning. The resources used are able to help the children learn and absorb the mathematical activity that base-ten number system and the myriad relationship with number may be included when using the Montessori mathematical framework. Kingsley Montessori (No Date) demonstrates Montessori resources that practitioners may use in an activity that challenges children that is sandpaper numerals, the sandpaper numerals can be used in an activity that promotes children to count from 0-9, identify the numbers and to be able to place the numbers into the correct order of numbers whilst using an enjoyable resource. An additional method from Montessori, is for practitioners to help children gain a better understanding of placing numbers into the correct order is by using a set of numbers and dots that will represent the numbers, children would be asked to place the numbers into the correct order and add the correct amount of dots below each number. According to Back (2013) introducing manipulatives in the classroom can support the children to make sense of mathematics and help the children to have a better understanding of mathematical thinking and reasoning whilst using powerful tools to support the children to work out the answer. Manipulatives are the resources that practitioners will use in a mathematical activity with the children such as, bead strings, counters, dice, Multilink cubes and many more that can be used to help the children to become more familiar with the numbers and the number system. Back (2013) states that the resources that practitioners allow the children to use in the activity, the children should be able to freely choose what one they would use if more than one resource is available that would lead to

the same outcome. Practitioners should have a range of different resources that relates to numbers and the number system in different activities. The National Strategies | Primary (2009) states that resources are used to help the practitioners work with children in the Early Years Foundation Stage (EYFS) and practitioners working with children in the lower set of mathematics in key stage 1. The resources that the children would become aware of will be used throughout their lives. Mathematical resources are strongly used to represent numbers and to show how to use them in mathematics, this could be done within a group, class or individually. Practitioners would like for children to become familiar with numbers, for children to gain a clear understanding of how the world they live in works and how mathematics is used in every day to day. The resources that practitioners use will need to be flexible, the needs of other children should be taken into account while planning the activity, practitioners want children to feel confident and gain more of a positive outcome when learning with the resource and to develop on their understanding skills and enjoy while doing so. According to Top days nurseries (2016) natural resources allow children to use their imagination and develop on their fine motor skills and ideas, while plastic resources can limit children thinking skills.

Part 4

West Sussex County Council believes that the adult's role in teaching and supporting children in their learning with resources for Mathematics can be by creating an environment where children can build relationships with other children, parents, and practitioners where the children feel respected and valued as individuals. Practitioners should take in consideration that each child is their own person, children will have different dislikes and likes, different interests, and each child will be at a different level/stage of development, therefore some children may need more support and encouragement while taking part in an activity than others. When children are taking part in the activity, practitioners should allow enough time and space for it to be carried out and for explaining to be done when needed. Practitioners should plan activities as play based allowing the children to work within a group or independently indoors and outdoors, practitioners should take into account that there is a possibility that some children in the setting may have learning difficulties. West Sussex County Council states that practitioners need to encourage children to explore problems that will occur in everyday life, children should be taught the correct Mathematical vocabulary during play activity and out of the activities. According to Education Endowment foundation (2020) for practitioners to support children learning through mathematical activities that focuses on different Mathematical skills and concepts, practitioners should allow time for Mathematical activities each day, mathematics can be explored by children in many ways therefore practitioners are able to choose from a variety of resources what to include in particular activities such as learning through, puzzles, songs, games, and more enjoyable resources for the children, practitioners should be aware that gathering different resources ideas takes time. Education Endowment foundation (2020) also states that the setting the practitioner is in should help the practitioner to improve on their own knowledge and understanding of Mathematics and how the children learn and how it would have an impact on Mathematical pedagogy. According to the Welsh Government (2019) mathematics plays a critical role in our day to day lives, it is important that the practitioners ensure the children see the mathematics and the numeracy activity as engaging, inspiring, and positive learning this will be allowing the children to stay focus on the activity and be interested to learn furthermore about mathematics. The foundation framework declares that children should be able to learn indoors and outdoors, the children should be introduced to the number system that will allow the children to identify the quantity and whole numbers and learn what the numbers represent. Promoting early mathematics skills

Kimberley (2016) states that early mathematics is down to the practitioners to promote and to help children enjoy learning about mathematics. Practitioners are able to take different approaches to support the children through their learning, practitioners can support children by setting out achievable activities and would be able to by group activities that provide a fun group of learning games, a child led activity where the children have the opportunity to explore mathematics for themselves, perhaps the activity might include a computer game that includes learning about mathematics or the interaction from the practitioner. Kimberley (2016) suggests that by practitioners gaining the correct skills and methods to approach supporting children in their development of mathematics, can have a positive impact on the development of the children in the setting.

Reference list

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