

Part 1 - Choose a Photograph

The Garden



Part 2

Feature 1 – Animal Life

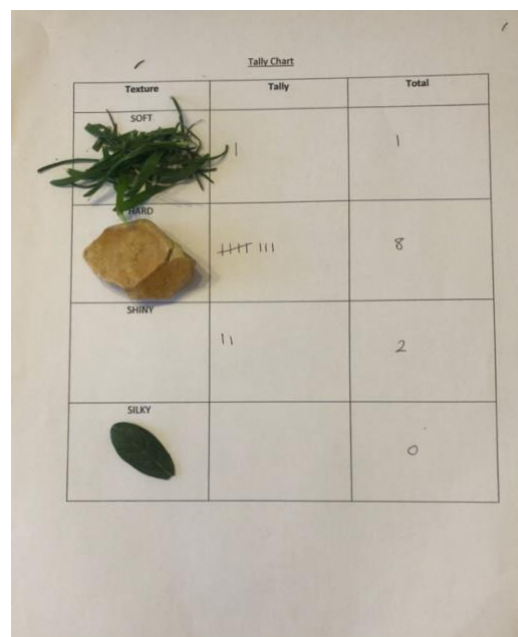
The first feature I have chosen from the picture is the horse in the field. I have chosen this feature as it will provide an opportunity for children to explore and learn about life cycles which will support the children's holistic learning through a science concept. To Adapt to that the children could also go on a bug hunt which will would further their knowledge in other life cycles and able them to learn about different living things like the bugs, they could also be provided with magnifying glasses to get them to really focus on the activity. To help the children develop further skills in the natural environment, it could be ideal for children to have a picture or a book of the life cycle of a horse with them to get a better understanding of the life cycle as well as developing their reading skills. the children should be allowed to touch and feed the horse with their favourite treat; carrots, but only with caution that they understand that there is a correct way of doing it without putting themselves in danger. By allowing the children to do this it will teach them to become aware of new senses and emotions. Furthermore, as another science concept it would be ideal for the children to get the opportunity to grow their own cattorts to feed the horses as well as teaching them that they are able to grow some of their own food in the same way, this will also develop their fine motor skills. The children will also develop physical skills by moving around and taking place in activities with movements from their arms and legs that will also encourage core muscle, the children should be able to show emotion as they take place in feeding and touching the horses, some children may be scared and others could feel very excited to take part. To help the children discover mathematical concepts activities such as counting how many legs the horse has, discovering the colour of the horse, learning about the height allowing the children to discover new ways of measuring seeing as horses are measured in hands, it could also be a fun activity for the children to measure each other in hands or make it creative and add paint to the environment allowing them to create hand print pictures of the horses or even hand drawn ones.

Feature 2 - Uneven Surfaces

The second feature I have chosen from the picture is the uneven surfaces. I choose this feature as uneven surfaces can be fun for the children as well as developing them naturally by allowing the children to walk and run or even roll up and down the slopes as it develops their physical development as well as their gross motor skills and teaches them how to balance. Allowing the children to walk and run or roll up and down the slopes will also strengthen their core muscles. To make things more fun for the children resources such as tyres or hula hoops; both come into a mathematical concept as they are the same shape allowing children to learn about different shapes and sizes, they can use these resources to roll down the slopes and are able to compare the weight and speed they roll down the slope which is a scientific concept. Another mathematical concept could be that the children are provided with timers to time how fast the objects roll down the slopes this will allow children to learn to control time management as they will need to know when to press the timer to start and stop as well as reading and recognising the number on the timer when finished. The children could also roll themselves down the slopes which they can compare themselves to the tyres and hula hoops. They may wonder how they can roll down the slopes the same as they tyre, but why they are not the same shape; this is also a science concept. Other Resources such as pipes, water, tennis balls, timber, toy cars, can be added to the area for children to explore what they can do with them, the children could create some ramps with the timber provided going down the slopes and they could push toy cars down, the children will develop creativity and imagination by creating something like this, they will also develop physical skills as well as gross motor skills, the children may also be expressing emotions during this activity. By this activity of pushing the cars down the ramps the children will learn about force as well as discovering speed. With the other resources provided such as the pipes and water, children could learn about gravity, by being able to use these resources children could lean them against the slopes by building a water shoot by this they would develop their physical skills from their hard work of building it and moving objects, Gross motor skills are also developed, they are exercising, they also develop language by communicating with others, they are working in a group by building things together, they are collaborating, and they also learn new language with the support and guidance from the adult.

Feature 3 - Textures

The final feature from the picture is textures. There are many textures that can be seen such as the grass is a different texture to the stones that are seen in the middle of the garden. These will be different for the children to feel with their hands or even when walking on. This will develop the children's holistic learning by supporting their senses especially their touch, more so the children will get a better understanding of their dislikes and likes by understanding different textures. Textures they may find in this picture can include; hard, soft, fluffy, rough, sharp, silky, shiny. The children could group a variety of things into particular groups for example they may put stones and the wall in the same group as they feel the same or the twigs and the fence. Children could also group different leaves; questions could be asked why do all the leaves feel different, but they are the same. Again, this is a scientific concept. To add a mathematical concept to this activity, it could be ideal to encourage the children to see how many shiny things they find in the garden and could later on make a tally chart (like the one pictured below) which is a mathematical concept as they are counting and understanding numbers.



Texture	Tally	Total
SOFT	1	1
HARD		8
SHINY		2
SILKY		0

RISK BENEFIT ASSESSMENT

Location / Activity:	The Garden	Date:	20/03/22
Assessor:	Laura Davies	Review date:	

ACTIVITY	How will young people BENEFIT from this activity?	Hazards and risks	Who is at risk?	PRECAUTIONS in place to reduce the risk of injury	Overall risk RATING: L/M/H
Being in the outdoor environment	The children benefit from being in the outdoors as it will develop them in many areas and better their health and well-being.	Children could get Sun burn. Some children have allergies or hay fever. Allergies outdoors can include bee's, grass, animals, plants.	Children and adults	Make sure that the children do not have any medical condition that require things they cannot come in contact within the outdoors. Ensure to check the environment before going outdoors for anything that can cause harm or injury to the children like sharp edges, cat litter or other animal faeces, any nests such as bugs or bees. Ensure that the children wear the correct clothing for the outdoor environment that they will be playing in for example hard wearing clothes and welly boots. Ensure that the children have a hat on and sun cream before allowing them to be in the outdoor environment when the suns out. Ensure that consent forms are signed by Parent/guardian before allowing the children outdoors in case of any allergies. It is also important that the children are provided with their medication if needed. Ensure to take a first aid kit outdoors for any minor injuries.	Medium

ACTIVITY	How will young people BENEFIT from this activity?	Hazards and risks	Who is at risk?	PRECAUTIONS in place to reduce the risk of injury	Overall risk RATING: L/M/H
Walking on uneven ground	Can support children's balance and develop physical skills. children become aware of their bodies and how they work.	Risk that the children could fall causing cuts, bruises, sprains and other injuries.	Children and adults	Explain to the children that the surface is something different so they may want to be careful while walking up and down the surface at first until they become familiar with it. Allow the children to use the slopes to roll themselves down. Encourage appropriate clothing for the environment.	Low
Feeding the horse	Learning about nature and living things.	Getting bitten or kicked.	Children and adults	Demonstrate to the children how to feed the horses correctly and ensure them not to go behind the horse as It could kick. Ensure the children are with an adult when feeding them.	Medium
Planting vegetables and other plants.	It will allow children to become aware of nature and to take care of things. It will also develop the children's fine and gross motor skills.	Some children could have an allergic reaction to certain plants. Some plants could be poisonous.	Children and adults	Ensure that consent forms have been signed and ensure that the children do not have any allergies to do with the activity. Ensure that the children wash their hands after the activity.	Low

ACTIVITY	How will young people BENEFIT from this activity?	Hazards and risks	Who is at risk?	PRECAUTIONS in place to reduce the risk of injury	Overall risk RATING: L/M/H
Weighing stones and twigs.	Children will learn how to read numbers as well as understanding that there are different ways of measuring things. By weighing two different things children will become aware of the weight on these objects as well as different textures that will help them develop their senses.	Children could put the stones in their mouth which could cause them to choke. Children could also accidentally hit each other in the eye with a twig which could cause damage or even blindness.	Children and adults	Discuss with the children that they can put them in their mouth and explain the risk to them. Ensure that the children are using the twigs with caution and also explain to them that the ends can be sharp and to not put the close to anyone's eyes.	Low
Bug hunt	Great adventure and exploration for children that will develop their understanding of the world through a scientific concept of life cycles as well as being able to develop fine and gross motor skills and physical development.	Children could be bitten or stung by some bugs. Some children could have allergies to some creatures which should be included in their consent/medical form.	Children and adults	Check the area before starting the activity for any nests such as bee or ants. Inform the children with any hazards before starting the activity. Explain to the children what not to touch/pick up.	Low

ACTIVITY	How will young people BENEFIT from this activity?	Hazards and risks	Who is at risk?	PRECAUTIONS in place to reduce the risk of injury	Overall risk RATING: L/M/H
Water activities	children will develop many skills through water activities such as cognitive development learn about scientific and mathematical concepts, promote social learning and cooperative effort and enrich language experiences. It also strengthens motor skills and children's sensory.	Children could slip with water on the ground. Risk of falling over the water bucket causing an injury. Can have Skin irritation when soap is added to the water. Drowning. Water becoming dirty.	Children and adults	Ensure that the water is placed on a mat to ensure that the ground doesn't get slippery. Ensure that the buckets are out of the way in an area that isn't in the children's way all the time. Ensure to check their medication/consent form for any reactions before adding. Ensure that the children are under supervision at all times around the water. Ensure that the children are aware that they should not put their head in the bucket. If the water becomes dirty ensure to change it due to bacteria.	Medium
Tyres	Children can recognise patterns and make connections with other patterns as well as compare them to other shapes which is a mathematical concept.	Risk of having rubber burn. Rubber on tyre getting too hot in the sun causing significant burns.	Children and adults	Ensure that the children use the tyres with caution. Ensure that the tyres are not used if they are too hot to prevent the children from getting burnt.	Medium

Timber	Ables children to be creative and build things while developing their gross motor skills and physical development as well as their creativity skills.	Children could have an injury/sprain from lifting or moving the timber. Children could get splinters from the timber.	Children and adults	Ensure that the timber isn't too heavy for the children to carry. Remind children that they can get splinters from the timber and ensure to take a first aid kit.	Medium
Bubbles	Bubbles are great for the children to develop their speech, language and hearing by the motion of the mouth which strengthens the mouth muscles to further help their speech. Bubbles also help children to develop different senses such as touch.	Children could swallow the mixture. Could have a reaction to the washing up liquid in the mixture.	Children and adults.	Explain to the children that they are to blow the bubbles and not to swallow them. If a reaction occurs without any information being on their medical/consent forms the first action to take is to phone the parent/guardian to explain and for them to give further consent of what can be done for example the child may need to be picked up and taken to a doctor.	Low

Part 4 - 2000 words

With reference to theory and research consider how the adults working with children can support and encourage children to have an opportunity to engage with mathematical and scientific concepts in an outdoor space such as the one in your photograph.

The Adult Role is to provide a Stimulating environment to encourage curiosity, discovery and exploration. It is important that the adult chooses an environment that will be suitable for the children for them to reach their full potential. Froebel (1967) emphasized the value of children's outdoor play and believed outdoor play to be essential for physical, intellectual, and moral development. It is also the adult's role to provide the children with resources to help their development. It has been described by Nicholls (1971) 'Loose parts' theory is about remembering that the best play comes from things that allow children to play in many different ways and on many different levels and loose parts fits the needs of that theory as they are materials that can be moved, carried, combined, redesigned, lined up, and taken apart and put back together in multiple ways. It is also the adults role to encourage the correct clothing suitable for the environment for the children such as hardwearing clothing that would be suitable for the outdoor environment to prevent the children from things like nettles. It is also the adult's role to ensure that consent forms are signed by parent/guardian for the children to take part as it is important that the adults are aware of any allergies or any other information that may cause life threatening reactions.

In this assignment the outdoor environment is in the garden which allows children to be in a natural environment which has been supported by Froebel (1967) as he believed that the garden is an ideal environment for young children as he also adds it develops an understanding of the natural world. In comparison with Froebel's theory, Forest Schools again greatly support the natural environment as it is explained by forest school (2012) that they offer opportunities for holistic growth through regular sessions, they further explain that it is a long term program that supports play, exploration and self-esteem through learner inspired, hands-on experiences in a natural setting. Within the environment chosen it will allow children to explore the natural world. By providing resources and giving the children independence it will develop many skills naturally. Resources like Magnifying glasses could be provided with a bug search list like the one below;



Twinkl (2020)

This will able children to explore and find living things, it could be a great idea that the adults make it creative while allowing the children to create their own bug farm while explaining to them how the bugs live which then comes into a concept of Science, furthermore having the horse in the field next to the garden the adult could encourage the children to compare the bugs and the horse as there are both living things. By allowing the children to compare both they could then group them as they both come from different families. The differences could be compared by encouraging the children to count the differences in legs for example spiders have eight legs and horses have four, this is a great mathematical concept, books and posters are a great to also help the children get a better understanding of the life cycle of these living things. While comparing them the children could also be provided with gardening equipment for them to grow their own Carrots for the horses again as a scientific concept this could be further explored as it is a great way for children to learn that they can grow their own food which has also been described by Better Health Channel (2010) that Children develop new skills and learn about science and nature from growing their own food. This way they are also becoming aware of the natural world and understanding how to take care of things which is also in Frobel (1967) theory as he describes ‘children develop an understanding of the natural world, being able to appreciate it’s beauty and learn to take care of it’.

It has also been explained by capital gardens(2017) that valuable life skills that children learn through gardening can include being organised, responsible and creative as well as being self-confident and healthy. Likewise, Mind (2021) explains that Spending time in green space or bringing nature into your everyday life can benefit both your mental and physical wellbeing. For example, doing things like growing food or flowers, exercising outdoors or being around animals can have lots of positive effects. Other skills such as fine and gross motor skills can be developed through gardening which has been described by Garden benches (2021) gross motor skills are developed through digging as it builds up muscle strength and helps with balance

and fine motor skills through gardening involve planting seeds as it requires concentration and helps develop fine motor coordination. Furthermore equipment such as measuring tapes, weighing scales could also be provided as part of a mathematical concept by providing these it will allow children to be able to explore with them, they may want to measure the plants that have already been planted, they could weight different things for example they could weight ten stones and ten twigs which comes into a mathematical concept as wells a scientific one due to them having to be able to count as well as understand why is the weight different by using the same number of things which will teach them about mass and volume.

The adult's role of feature two can encourage children's balance and coordination as well as bringing concepts of mathematical and scientific into the areas of learning. By looking at the picture balance and coordination can be done naturally by the slopes and uneven surfaces such as the wall and the uneven ground. It has been described by toucan learning (2022)

That walking along a low wall is great for balance and gross motor skills. by the adults also allowing the children to walk, run or roll down the slopes will also help the children's balance and coordination skills. by this it is also developing the children's physical development. By adding resources like water, jugs, pipes, tennis balls and feathers the children could use the slopes or the wall to lean the pipes against and pour water down with a jug which they could also use as another form of measuring by using the jug, with the other resources provided they could then use a ball and a feather to push down the pipes with the water and compare which will teach children about forces and gravity which both are scientific concepts. It has been mentioned in the Curriculum of wales: Area of learning and experiencing science and technology (2019) that understanding forces and energy helps us to predict and control the behaviour of our environment. Other resources that the adult could add to the environment could be toy cars, hula hoops, tyres and timber this could allow children to create a ramp with the timber this will develop the children's imagination, creative and physical development by allowing them to move things and build them independently, they could place the ramp off the slopes to push the car down or the hula hoop or even the tyre, the comparison with these is that the wheels on the toy car is the same shape as the hula hoop and the tyre they are all circle shaped, therefore they will give the same Energy but will travel at different speeds due to gravity which is another concept of science. To add a mathematical concept to this activity the children could move the ramps to different slopes and the adult could provide them with a timer developing their time management skills by knowing when to press the timer as well as read the numbers on the time when its stopped. Fine and gross motor skills will also be developed

during this activity. With water added to the environment the adults could also add soap such as washing up liquid for children to get the opportunity to mix the water and soap together to create bubbles this another scientific concept. Furthermore the adult could add other resources to that activity such as paint, shallow tray, brushes, straws and white paper as well as water and washing up liquid to create soap bubbles pictures, it will give children the opportunity to mix the paint, water and soap together and then blow bubbles with a straw for them then to place the paper on the bubbles to create a picture this will develop many skills like creativity, fine motor skills as well as teaching the children mouth movements with the ability to develop language skills. It has been said by twinkl (2016) that the science occurs as the washing up liquid hold air in its bubbles when you blow air into the mixture and because there's water in the mixture it gets sucked up by the paper leaving the print.

The third feature chosen from the picture in this assignment is texture, it is ideal that the adult chooses an environment that includes different textures. It has been said by toddle around (2022) touch enables children to get an understanding for what objects are what they feel like by experiencing various shapes and textures. Furthermore, toddle around explains that it is the adult's role to ensure to use touch in conjunction with language to help them build vocabulary.

As part of the adult's role, choosing a setting suitable for Children can sometimes be challenging as it is important the environment is safe for the children however Risk is essential to play. In the outdoor learning handbook (2009) risk management is mentioned meaning that outdoor learning enables children to take appropriate risks. Furthermore Waller, Sandseter, Wyver, Arlemalm-Hagser & Maynard (2010) explain that Those who would not allow risky play do not believe in its value. Again, it has been said by Early Education (2022) that our role as adults is to make sure we enable risk taking without placing them in actual danger. It is important the adults ensure to give children independence. Likewise, Bazley (2008) states that risky play means providing opportunities for all children to encounter or create uncertainty, unpredictability, and potential hazards as part of their play.

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