

Section 1



(European Environment Agency, 2019)

Section 2

Climbing trees is an activity in which can positively effect children's development and resilience as according to Gull, Goldstein and Rosengarten (2017). By climbing the trees the children will be able to gain understanding of mathematical concepts such as heights and prospects. Welsh Government (2019) states that children should be able to have first hand experiences with mathematical concepts. This can be achieved here as children will have the opportunity to understand abstract concepts such as heights, distances and lengths by acting them out and seeing them through their play. An example of how a child may begin to process and think about mathematically would be if a boundary set by the practitioner would be that a child could only climb twice their own height. To work this out children would have to be thinking about how tall they are and how much taller would be twice their height. It would spark a thinking process in which children would be thinking about different aspects of maths such as multiplication. Also, children who are observing the climbing of the tree could benefit in a maths and science way as they would be thinking mathematically of heights and letting the other child when to stop. They would be thinking in a scientific way as they may be beginning to think about forces, like for example questioning why would the child fall from the tree if they left go, or why it is difficult for them to climb it in the first place.

The activity of dropping objects into a body of water presents a range of learning opportunities (Victoria State Government, 2019). By children dropping objects that they could find into water they have the opportunity to learn about abstract concepts like forces such as gravity. A sink and float activity works by children using, in this case, natural objects found in the woodland and predicting whether they may sink or float in water. By making these predictions and carrying them out children are encouraged to think about the factors that may impact the outcomes such as forces, depth of water and properties of materials. Children will then have opportunity to trial and error different ideas they may have to change the outcomes, this encourages them to think critically and problem solve. Children will be presented with opportunities to trial and improve as outlined in the principles of progression in the Welsh Curriculum (2019), they will be presented with this as they may begin to evaluate why their prediction was wrong and how they could change the outcome. Children can also use this sink and float activity in order to recognise patterns from observations they have made and communicate these findings to peers and adults around them (Welsh Government, 2019). During this activity children will also be faced with mathematical concepts such as weight and density of the objects as well as heights and distance of how they drop or throw in the objects. Children are likely to, without knowing, group and classify objects, such as light and heavy, and make observations and predictions based upon these. Pace (2019) supports this and suggests that a sink and float activity encourages children to make predictions and observations on buoyancy and density and begins to spark scientific thinking within children.

Another activity in which children will take part in could be finding and sorting materials and objects in the woodland. Children would engage in an enrich learning experience through both finding and sorting the objects. When looking for materials children will become aware of other living things around them by seeing

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them first hand, they have the opportunity to learn about lifecycles, habitats and how living things depend on their surrounding environments to survive. The Welsh Government (2019) states that children should be able to explore relationships between living things, their habitats and their life cycles. This can be done through exploring as children will have the opportunity to see living things and where they live. The Welsh Government (2019) also states that children should also have opportunities to expand their knowledge of threats to living things and how we can protect them, this can be done through exploration of the woodland as children will become aware of themselves as causing potential harm by stepping on or picking up woodland creatures. Moving onto sorting the materials and objects collected the children can gain knowledge and understanding of different properties of materials, for example rough, smooth or shiny. By sorting the materials gathered the children would take on both mathematical and scientific thinking skills. The children would use their own understanding of grouping and sort accordingly, therefore each child's perception of grouping may be different. For example, some children may group materials according to shape and length and other may group materials according to properties.



(Play Withing Early Years Classrooms, no date)

This is an example of sorting and classifying, these children have grouped these materials according to colour. The Welsh Government (2019) suggest that children should have opportunity to show that they can recognise different properties of materials and also recognise that nature provides these different properties.

RISK BENEFIT ASSESSMENT

Location / Activity:	Woodland	Date:	15 th March 2022
Assessor:	Grace Evans	Review date:	1 st August 2022

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 grounds	- Can improve gross motor skills. - Can improve the vesicular system and coordination. - Walking on uneven grounds can help improve balance in young children. - Can allow children to be aware of their bodies and how it can help them (for example, putting arms out to balance, looking where they are going).	- Children could fall and hurt themselves resulting in cuts, bruises, bumps and other injuries. - There could be sharp objects on the floor that children could stand on or fall on. - Ground could be slippery and children could fall or slide causing grazing on skin.	- Children - Adults	- Always carry an appropriate first aid kit to treat cuts if needed. - Ensure the children are aware that the ground is uneven and they should walk or run carefully. This can be done through discussions with the children before approaching the location. - Appropriate clothing and footwear must be worn, e.g. long trousers, long tops and wellies. - Children should be aware that if they have a cut or graze that they should tell an adult around them in case it needs to be treated to prevent infection.	L
Climbing trees	- Can improve gross motor skills. - Children can become aware of forces and gradients. - Children become aware of their own bodies and strengths. - Can improve and promote problem solving skills. - Can promote mathematics in estimating distances and lengths.	- Children can fall from trees causing injuries such as cuts, bruises and grazes. - Children may be bitten or stung by bugs in the trees which may cause skin reactions. - Children could cut themselves from sharp branches or bumps in the trees	Children	- Ensure boundaries are set in regards to which trees are not to be climbed, children must be aware that not all trees can be climbed and only the ones that have been checked by adults can be climbed. - Ensure that an appropriate first aid kit is carried. - Children must be made aware that an adult must be supervising when they are climbing a tree and not to do this without an adult close. - Speak to the children about appropriate weather to be climbing, for example in wet conditions the branches will be slippery therefore they should not climb when the trees are wet.	L

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
Exploring the woodland area and finding different size and shape objects.	• Can improve gross motor skills. • Can improve fine motor skills. • Can improve co-ordination and balance in children. • Can allow children to gain understanding of different properties, sizes and shapes of objects. • Can improve children's understanding of world and what is around them by exploring and seeing for themselves.	• Sharp or dangerous objects may be on the ground that children could pick up and cause injuries. • Low hanging branches from trees could cause injuries such as cuts and grazes to head or face when exploring. • Running water could be near and children could fall into water and cause shock or injury to children. • Strangers could be walking around the location and could approach children and cause harm. • Children could wonder off and leave adults and other children.	• Children • Adults	• Ensure that the location is checked and assessed before hand for any litter or objects on the floor that could cause harm, and if any is found it is disposed of in the appropriate manner. • Ensure that children are aware of risks before approaching the location, such as the low branches, and that the importance of being careful when exploring is discussed. • Extra staffing around water areas will be needed in order to supervise effectively and safely. • Discussions before hand about boundaries and where they can explore will be undertaken and extra staffing will be a factor to ensure these boundaries are in place. • 'Stranger danger' will also be discussed with the children before approaching the location and children should be aware of the risks of speaking to strangers and what they should do if somebody approaches them.	M

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
Dropping objects into a pond.	• Improve fine motor skills. • Can provide opportunities for expansion of knowledge of lifecycles, habitats and other living things. • Can demonstrate concepts such as gravity and forces. • Opportunities for sustained shared thinking. • Can provide opportunities for development of knowledge in properties of objects.	• Sharp or dangerous objects may be found near pond that children may pick up. • Children may slip or fall into water. • Children may cause harm to life in the pond causing themselves stress and upset. • Bugs and insects may linger around the pond resulting in bug bites or stings.	• Children • Adults	• Children must wear appropriate clothing such as wetsuits and welly boots. • Children must be aware of water and what can happen if they are not careful (why they should not step too close to edge etc). • First aid kit must be carried at all times with appropriate equipment, such as bite cream, plasters etc. • Extra staffing around the water to ensure ratios are upheld at all times. • Practitioners should check area before for any trip, slip or fall hazards around the pond and if able to remove them but if not be cautious of them. • Practitioners should scan the surrounding area of the pond for any dangerous or harmful objects and remove if possible. • Ensure children know if there is life in the pond (such as fish) and discuss the harm they could do if they drop something or throw something onto them in order to protect wildlife.	M

Section 4

The outdoor environment provides children with rich opportunities for maths and science learning as it sparks an interest and engagement in real life problem solving skills (McLennan, 2017). Olson, Mazzocco and Ridge (2021) further develops this and suggests that when children are free to explore the outdoors children will naturally play and think mathematically in a joyful way, this joyful play develops a positive attitude in the children to maths. Learning through Landscapes (no date) state how learning maths and science in the outdoors includes activities such as walking barefoot in grass, building dens, measuring trees and listening to sounds on a nature walk. Wisbey (2018) agrees here and further the point by detailing how maths and science can be as simple as the child finding shapes in leaves and feeling textures around them and doesn't require expensive and elaborate resources. Rigby (2022) supports this and underpins that children do not need a lot of resources outside as they can find learning and play in the world around them, an example given is making mud pies with soil.

Bento and Dias (2017) imply that due to the everchanging environment that can be seen outside it provides a wide range of opportunities for different types of learning that cannot be replicated inside. However, Froebel (no date, as cited by Tovey, 2012) suggests that both indoor and outdoor environment hold equal value and wherever possible children should be able to move easily between both and therefore allowing play to flow between both. Warden (2020) agrees with the equal importance of both indoor and outdoor play but suggests that practitioners fail to understand and acknowledge the importance of outdoor play and instead prefer play based learning indoors. The outdoor environment can encourage problem solving skills as well as negotiating risk (Marchant, Todd and Brophy 2019). Waite (2011) furthers this and states that a study shows that children were able to expand their knowledge on parts of the curriculum such as science and maths through spending time in the school garden.

The role of an adult is to support the learning of children and accommodate their ideas and exploration (Waller, 2011). Adults need to become more aware of their surroundings outdoors and develop a deeper understanding of the importance of learning outdoors and how it can impact children. By adults having this enthusiasm and awareness of what is happening around them and this enthusiasm will reflect in the children (Watts, 2020). Bilton (2010) furthers this and states that the success of outdoor play relies on the staff and what they can do to support the learning of science and maths outdoors. Bilton (2010) expands upon this and suggests that if practitioners are unwilling or not fond of science and maths in the outdoors then the children will not have a rich engaging environment set up by adults to do so. However, Hunter *et al* (2019) contradicts the notion of a teacher having to facilitate learning in the outdoors and suggests that children can find science and maths learning through free exploration and play in the outdoors. The Welsh Government (2009) state that practitioners need to consider a well-planned and resource full environment that can support child-led play and learning when thinking of outdoor play.

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In outdoor learning open ended question can be a powerful technique used by adults to deepen the child's understanding of maths and science and also to engage learners in extending their knowledge, open ended questions such as 'What do you think will happen?' can encourage independent thinking and guide children in problem solving and taking charge (Arnerich, 2022). Minnesota Children's Museum (no date) supports this and details that there are many benefits that lay within adults asking open-ended questions, they suggest that they boost critical thinking, creative thinking, communication and confidence. The National Strategies Early Years (2009) supports this notion of open-ended questions benefiting all these contributes and suggests that all play essential roles in the success of children in science and maths. Furthermore, sustained shared thinking as defined by Brodie (2014) is a conversation or activity with a child with an interest on both parts to find out more. Brodie (2014) expands on this and details that an effective teaching method is sustained shared thinking between a child and an interested adult who can engage in an explorative attitude and conversation. Siraj-Blatchford and Asani (2015) supports this and details that learning through play begins first with solitary play and the child goes on to develop the capability to share and engage in sustained shared thinking, therefore it is the adults role to wait for the child to initiate this interaction and conversation.

MacKintyre and Mcvitty (2004) talks about how when children learn through moving and hands on activities their brain and bodies develop simultaneously, by being outdoors the brain is built through the creation of nerve networks and facilitates and deepens the learning of the children. O'Connor and Dickinson (2019) further the advantages of learning and moving outdoors in relation to the development of nerve networks by stating that moving and learning outdoors can aid in the development of the vestibular sense that controls balance. Worth (2010) spoke upon that children playing and exploring the outdoors acts as a powerful catalyst for learning science by witnessing abstract concepts. Education Scotland (no date) supports this and suggests that children are free to be themselves outdoors with less restrictions and in a natural learning environment, they suggest that children who may be quiet in a classroom may be louder and more vocal outside whereas children who find the classroom restrictive may become calmer and more focused outside. The outdoors as a learning environment can hold many different benefits to a child's development and learning, children who spend time learning and exploring natural enabling environments perform better in mathematics and science as they have opportunity to explore mathematical and scientific concepts through their play and exploration outdoors (King's College London, 2011).

Loose parts was first coined by Nicholson (1971) as materials and resources that have no pre-planned use, these materials should be able to be moved, stacked, lined up etc. Pacey (2019) talk about loose parts and how all the little things that may not traditionally stack up as toys can encourage children to undertake their own learning. Flannigan and Dietze (2017) furthers this and underpins that the addition of loose parts in an outdoor environment can provide rich opportunities for maths and science learning through a widening of play possibilities.

Gibson (1979) put forward what is called the affordance theory, the theory implies that the world is perceived not just in terms of object shapes but instead in terms of what the action possibilities are, therefore the perception drives action. Loose parts spark detection, children explore the affordance of objects and loose parts

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by moving them, for example stacking or throwing blocks is encouraging thinking and further play experiences (Early Years Educator, 2016). Campbell and Speldewinde (2020) furthers this and links loose parts to science learning in the outdoors by stating that the practitioners interaction with the child whilst using loose parts augment children's science learning. Piaget (no date, as cited by Carruthers and Smith, 2000) coined a theory that suggested that children played an active role in what they learn and how they learn it, he called them 'little scientists' as he believed that children who were free to experiment made observations constantly and through this learnt about the world around them.

As according to the Forest School Association (no date) a forest school is defined as a child-centred inspirational learning process that offers opportunities for growth through outdoor learning, it does this through supporting play, exploration and risk taking. Maynard (2007) suggests that forest schools are able to meet the curriculum frameworks in Wales through outdoor play whilst also engaging children to raise self esteem and motivation to learn. Knight (2011) outlines that through play in forest schools science and maths can be taught, an example given is learning through earth and water, by children playing with earth and water creating 'mud pies' they are learning maths through weighing thing up and estimating and learning scientific concepts like changing states and properties of materials. Siren (no date) talk about how the role of the adult in outdoor learning is to trust the children, they state that children know what they want to learn and through play they can learn across the curriculum. Siren (no date) go onto say that whilst adults should be present in the outdoors they should be there for support when the child needs or asks for it. Forest Research (2022) suggest that children become more confident and able learners in the outdoors as it is a free environment that they are able to experiment with less restrictive boundaries to adhere to. Duglan (2015) supports this and states that through speaking to children she found that they were interested in movement and speed, prospect, spinning and turning and manipulation of body in space which are all things to be achieved outside that can impact the science and maths learning of children.

As according to Inspiring Scotland (2020) there are a range of reasons why practitioners are reluctant to allow learning in the outdoors, but one of the main reasons is because they do not like the outdoors themselves or they do not understand the extent in which learning can happen outdoors. The Welsh Government (2009) state that in order for practitioners to facilitate effective outdoor learning they need a confident and motivated state of mind rather than lesson plans or resources, they state that practitioners need to understand that the foundation phase and the outdoors are inseparable. Bilton (2020) puts forward the concern that only the practitioners who have had good experiences of outdoor play themselves may go onto provide effective learning environments and experiences outdoors. This is supported by Duglan (2015) who says that practitioners views of learning outdoors correlates closely with staff interests and comfort so therefore only practitioners who were interested in outdoor play actually carried it out effectively. Duglan (2015) talks about how practitioners feel about learning in the outdoors; she stated they felt they needed more time in settings to organise and plan for outdoor learning, they also felt that they needed to be heard more by setting owners about what is happening in the outdoor areas and have more of an input into new resources coming in.

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According to NICE Public Health Collaborating Centre (2008) children are more likely to be encouraged by adults around them to be active indoors instead of outdoors, they believe this may be due to safety concerns or the high focus that practitioners have on maximising learning indoors. Constable (2012) underpins that practitioners often think of learning as sitting down indoors with traditional learning tools such as pen and paper, however, they should steer away from this and find learning in the outdoors. Evans (2011) agrees here and suggests that schools and settings are not aware of the full potential of outdoor learning and therefore are not using the outdoors to its fullest potential in order to develop skills in key subjects such as science and maths. Furthermore, practitioners are not using the outdoors in order to benefit children as they are worried about the risk involved in allowing the exploration and discovery that is involved in the range of learning (Waite, 2011).

References

- Arnerich, M. (2022) *How to use open-ended questions in the Early Years*. Available at: [How to use open-ended questions in the Early Years | Famly](#) (Accessed: 21st March 2022)
- Bento, G. and Dias, G. (2017) *The importance of outdoor play for young children's healthy development*. Available at: <https://www.sciencedirect.com/science/article/pii/S2444866416301234> (Accessed: 18th March 2022)
- Bilton, H. (2010) *Outdoor Learning in the Early Years*. 3rd Ed. London: Routledge.
- Bilton, H. (2020) 'Values stop play? Teachers' attitudes to the early years outdoor environment', *Early Child Development and Care*, 190(1), pp.12-20. DOI: [10.1080/03004430.2019.1653548](https://doi.org/10.1080/03004430.2019.1653548)
- Brodie, K. (2014) *Sustained Shared thinking in the Early Years*. 1st ed. London: Routledge.
- Campbell, C. and Speldewinde, C. (2020) 'Affordance for Science Learning in "Bush Kinders"', *International Journal of Innovation in Science and Mathematics Education*, 28(3), pp.1-13. Available at: [13943-43546-1-PB.pdf](#) (Accessed: 24th March 2022)
- Carruthers, P. and Smith, P. (1996) *Theories of Theories of Mind*. Cambridge: Cambridge University Press.
- Constable, K. (2012) *The Outdoor Classroom Ages 3-7*. London: Routledge.
- Duglan, S. (2015) *In full swing*. Available at: [ee-garden-project.pdf \(nurseryworld.co.uk\)](#) (Accessed: 21st March 2022)
- Early Years Educator. (2016) *Possibilities on offer*. Available at: [Possibilities on offer | Early Years Educator](#) (Accessed: 21st March 2022)
- Education Scotland. (no date) *Outdoor Learning*. Available at: [Outdoor Learning \(education.gov.scot\)](#) (Accessed: 23rd March 2022)
- European Environment Agency. (2019) *Eight facts about Europe's forest ecosystems*. Available at: [Eight facts about Europe's forest ecosystems — European Environment Agency \(europa.eu\)](#) (Accessed: 23rd March 2022)
- Evans, D. (2011) *The Times Educational Supplement*. Available at: <https://www.proquest.com/docview/900757693?pq-origsite=gscholar&fromopenview=true#> (Accessed: 21st March 2022)
- Flannigan, C. and Dietze, B. (2017) 'Children, Outdoor Play, and Loose Parts', *Journal of Childhood Studies*, 42(4), pp.53-60. Available at: [18103-Article Text-17156-1-10-20180317 \(3\).pdf](#) (Accessed: 23rd March 2022)

Word Count: 3706

Forest School Association. (no date) *What is Forest School?* Available at: [What is Forest School? | Forest School Association](#) (Accessed: 23rd March 2022)

Gibson, J. J. (1979) *The Ecological Approach to Visual Perception*. Hillsdale, New Jersey: Lawrence Erlbaum Associates

Gull, C. Goldstein, S.L. and Rosengarten, T. (2017) 'Benefits and risks of tree climbing on child development and resiliency', *International Journal of Early Childhood Environmental Education*, 5(2), pp.10-29. Available at: [EJ1180021.pdf \(ed.gov\)](#) (Accessed: 19th March 2022)

Hunter, J. *et al.* (2019) 'Balancing Outdoor Learning and Play: Adult Perspectives of Teacher Roles and Practice in an Outdoor Classroom', *The International Journal of Early Childhood Environmental Education*, 7(2), pp. 34-50. Available at: <https://files.eric.ed.gov/fulltext/EJ1254849.pdf> (Accessed: 21st March 2022)

Inspiring Scotland. (2020) *A practitioner's guide to outdoor play based learning*. Available at: [Practitioner-Tips-Outdoor-ELC-Cant-or-Wont-THRIVE-1.pdf \(inspiringscotland.org.uk\)](#) (Accessed: 24th March 2022)

King's College London. (2011) *Understanding the diverse benefits of learning in natural environments*. Available at: [\[ARCHIVED CONTENT\] \(nationalarchives.gov.uk\)](#) (Accessed: 18th March 2022)

Knight, S. (2011) *Risk and Adventure In Early Years Outdoor Play: Learning from Forest Schools*. London: SAGE Publications.

Learning through Landscapes. (no date) *Outdoor Lesson Ideas*. Available at: [Outdoor Learning ideas | Outdoor Lesson ideas | Outdoor Learning Resources \(ltl.org.uk\)](#) (Accessed: 18th March 2022)

Macintyre, C. and McVitty, K. (2004) *Movement and learning in the early years: supporting Dyspraxia and other leaning difficulties*. London: Paul Chapman Martin, C.

Maynard, T. (2007) 'Forest schools in Great Britain: An initial exploration', *Contemporary Issues in Early Childhood*, 8(4), pp.320-331. DOI: [10.2304/ciec.2007.8.4.320](https://doi.org/10.2304/ciec.2007.8.4.320)

McLennan, D.P. (2017) *Math Learning- and a Touch of Science- in the Outdoor World*. Available at: [Math Learning—and a Touch of Science—in the Outdoor World | NAEYC](#) (Accessed: 19th March 2022)

Nice Public Health Collaborating Centre. (2008) *A Review of Learning from Practice: Children and Active Play*. Available at: <https://www.nice.org.uk/guidance/ph17/evidence/review-8-active-play-371252125> (Accessed: 23rd March 2022)

Nicholson, S. (1971) 'Theory of loose parts: How not to cheat children', *Landscape Architecture*, 62, pp.30-34. Available at: <https://media.kaboom.org/docs/documents/pdf/ip/Imagination-Playground-Theory-of-Loose-Parts-Simon-Nicholson.pdf> (Accessed: 23rd March 2022)

Word Count: 3706

O'Connor, A. and Dickinson, K. (2019) *Sensory Processing: Part 2-Vestibular System*. Available at: [Sensory Processing: Part 2 - Vestibular system | Nursery World](#) (Accessed: 21st March 2022)

Olson, R. Mazzocco, M and Ridge, S.W. (2021) *Taking Math Outdoors: A Natural Learning Environment*. Available at: [Taking Math Outdoors: A Natural Learning Environment – CEHD News \(umn.edu\)](#) (Accessed: 18th March 2022)

Pace, A. (2019) *Sink or float experiment for preschoolers*. Available at: [Sink or Float Experiment for Toddlers and Preschoolers - Happy Hooligans](#) (Accessed: 17th March 2022)

Pacey. (2019) *Getting to grips with loose parts play*. Available at: [Getting to grips with loose parts play | PACEY](#) (Accessed: 23rd March 2022)

Play within Early Years Classrooms. (no date) *What is Classifying and Sorting?* Available at: [Classifying and Sorting - Play Within Early Years Classrooms \(weebly.com\)](#) (Accessed: 21st March 2022)

Rigby, D. (2022) *Making Play Work in Early Years Settings: Tales from the Sandpit*. London: Sage Publications.

Siraf-Blachford, I. and Asani, R. (2015) *The role of sustained shared thinking, play and metacognition in young children's learning*. London: Routledge.

Siren. (no date) *What's does effective teaching look like at the Little Forest Folks forest nursery?* [video]. Available at: [What's does effective teaching look like at the Little Forest Folks forest nursery? - Siren Films](#) (Accessed: 24th March 2022)

The National Strategies Early Years. (2009) *Children thinking mathematically: PSRN essential knowledge for Early Years Practitioners*. Available at: https://www.foundationyears.org.uk/wp-content/uploads/national_strategies_resources/childrenthinkingmathematically_psrn.pdf (Accessed: 21st March 2022)

Victoria State Government. (2019) *Floating and sinking*. Available at: [Floating and sinking \(education.vic.gov.au\)](#) (Accessed: 19th March 2022)

Waite, S. (2011) *Children Learning Outside the Classroom: From Birth to Eleven*. California: SAGE Publications.

Waller, T. (2011). Adults are essential: the roles of adults outdoors. In J. White (Ed.), *Outdoor provision in the early years* (pp. 35-44). SAGE Publications Ltd, <https://dx.doi.org/10.4135/9781446289099.n4>

Warden, C. (2020) *The values we lay in outdoor play*. Available at: [The values we lay in indoor and outdoor play \(earlychildhoodaustralia.org.au\)](#) (Accessed: 23rd March 2022)

Word Count: 3706

Watts, A. (2020) *Outdoor Learning through the Seasons*. 2nd Ed. London: Routledge.

Welsh Government. (2020) *Descriptions of learning*. Available at: [Descriptions of learning - Hwb \(gov.wales\)](#) (Accessed: 19th March 2022)

Welsh Government. (2022) *Mathematics and Numeracy*. Available at: [Mathematics and Numeracy: Designing your curriculum - Hwb \(gov.wales\)](#) (Accessed: 19th March 2022)

Wisbey, M. (2018) *Maths in the great outdoors*. Available at: [Maths outdoors | Maths activities outdoors | Community Playthings](#) (Accessed: 17th March 2022)

Worth, K. (2010) *Science in Early Childhood Classrooms: Content and Process*. Massachusetts: SEED Papers.