



Maths Games | EYFS

BEE GREEN AND ONLY PRINT IF YOU HIVE TO :)

USE THE ATTACHED HANDBOOK TO GUIDE YOU WITH SAFETY AND
USING OUR APPROACH

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Sharing the Muddy Love :)

Welcome



Message from our Founder - Sarah Seaman

Welcome :)

This pack will help restore purpose to your teaching and show you how getting a little messy can make outdoor learning more memorable for your students. If you're unfamiliar with the Muddy Puddle Teacher Approach then please refer to our handbook which will guide you through our Muddy ways. On this page you'll see the three Muddy Ms. These are our core values that remind us to give children the outdoor experience that they deserve. It can be very tricky at times not to let your indoor traits spread to the outdoors. We encourage you to use our tips and the attached handbook as these will help keep you focused and shed light when you need it. Have fun and enjoy getting Muddy!

Sarah :)



Muddy active



On cold days you'll want to keep the children even more active so don't be afraid to have little breaks where necessary. At Muddy HQ we call this 'dispersing'. We let the children go for a jog around the yard or jump on the spot and do star jumps if space is limited. This gets children warmed up and gives them that burst of energy they sometimes need to focus on more challenging work.

Some of the activities below require asking the children to sit down and do work on the floor. Get them to run around while they search and collect items such as sticks, leaves and mud. You can ask them to run, hop, skip or jump. Make it more challenging and increase the pace by putting a timer on how long they have to collect the items.

Muddy nature



We believe in BALANCE and while our goal is to promote the use of natural resources, we understand that this may be restrictive at times and not always possible in every lesson. But we do want to encourage you to use natural resources and most of our ideas will make this very easy for you. Why is this so important? Because it gives children the chance to experience and touch nature, all while getting good bacteria into their systems. It's also a much better sensory experience for children if they use natural resources rather than plastic. And above all, it encourages sustainability and teaches the future generation to respect the environment.

Muddy well-being



The Muddy Puddle Approach is passionate about school being a happy and safe space for children. Learning is such a gift and should always be fun for children of all ages. So try to distinguish between indoor and outdoor activities. Avoid using indoor practices that can often segregate groups, such as differentiating, grouping by ability or gender, competitions or stars of the day. Instead, let the children be children. Give them the chance to simply enjoy learning and achieve together without rewards. It will take some time to shift your mindset and teaching style, but don't worry. It will be worth it once you see the results!

Before you start



Summary

This pack will inspire you with lots of fun ideas which will help you plan your maths lessons. Maths can be a tricky subject to teach and children are often prone to losing interest when they're taught this indoors. This is where the outdoors can really help you stimulate their interest in the subject!

If it rains...

... don't panic! You might not be able to stay out for as long on a rainy day so here are some quick ideas to do in the rain. Start by counting the raindrops. Give each child a yoghurt pot before they go outside and get the children to see how many raindrops they can count in a minute. The children can then add their results together. Peter counted 12 and Susan counted 11 – how many raindrops did they collect altogether? Then change the direction and focus on capacity. Pour all the collected raindrops into a measuring jug and read how many millilitres of water they have as a group.

For more ideas like this, head to our Maths rainy day activity pack which you can find on our website.

EYFS objectives

Understanding the world

Children:

- Know the similarities and differences in relation to places, objects, materials and living things
- Talk about the features of their own immediate environment and explain how environments may vary from one another.
- Make observations about animals and plants, explain why some things occur and what changes they see.

Arts and Design - Exploring and using media and materials

Children:

- Sing songs, make music, dance and experiment with different ways of changing them.
- Safely use and explore a variety of materials, tools and techniques while experimenting with colour, design, texture, form and function.

Being imaginative

Children:

- Use what they have learnt about media and materials in original ways, thinking about different uses and purposes.
- Represent their ideas, thoughts and feelings through design and technology, art, music, dance, role-play and stories.

Maths

Children:

- Count reliably with numbers from 1 to 20, place numbers in order and say which number is one more or one less than a given number.
- Use quantities and objects, add and subtract two single-digit numbers and count both backwards and forwards to find the correct answer.
- Solve mathematical problems including doubling, halving and sharing.
- Use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects to solve problems.
- Recognise, create and describe patterns.
- Explore characteristics of everyday objects and shapes, using mathematical language to describe them.

**“CHANGE IS THE END RESULT OF
ALL TRUE LEARNING.” —LEO
BUSCAGLIA**

Resources to prepare

This pack includes a sample letter which you can send out to parents to ask them to bring in things like water bottles, yoghurt pots and glass jar lids. You'll also need some sticks and leaves. If you don't have these in your setting, take your class on a walk and collect as many as you can.

Maths activities



Number activities

Use sticks, rocks and leaves for children to use while they're counting. Each object represents a unit so work in units of 1, 2, 4, 5 or 10 depending on their ability. Ask the children to lay the objects in front of them, and then jump over or on them to embed their learning. Using a marker pen, draw a number on each object and then hide all the objects around your area. Get the children moving and active by asking them to find the hidden objects. Once they've found them, get them to put them in order or add them together.

To improve their ability to recognise numbers, make the shape of each number out of sticks and model how to break the sticks up to create bends. This will help with fine motor skills needed for the writing stage. Don't forget about the Muddy paint! To make the paint, mix mud with water in a yoghurt pot or on the floor. Ask the children to find a stick and write their calculations on the walls or floor. Alternatively, practise number formation.

Space activities

We sometimes don't realise how much time we spend using directional language when we're outdoors exploring spaces. This is an important skill that children need to develop and there are lots of fun activities that you can do to teach children this skill. Ask children to find a stick, leaf or rock and tell their partner where they found it using terms like 'on top of', 'underneath' and 'at the side of'. Alternatively ask children to find a stick and tell them to place it underneath or on top of something else in your space. Repeat this exercise with different objects such as rocks, leaves and acorns so that children practise using this language. Building big structures or big art pieces can also be a great way to enrich children with spatial awareness. Channel some inspiration from Art Attack and make big letters on the floor using sticks or rocks. Alternatively, make some 3D structures that are high, wide and long. Blindfolds are a perfect way to have some fun while learning and practising this area of maths. Ask children to work in pairs. One child wears the blindfold while the other guides him or her through the obstacle to locate a natural treasure, a stick or a stone!

Shape

Start by using some sticks to make 2D shapes, breaking the sticks up for any curves needed. Count the sides and corners. This can be done on a one-to-one basis with the child or can be done with both smaller and large groups. Create huge shapes from rocks, leaves and sticks. Then ask the children to walk up to the shape, stopping on the side or corner.

You can also try this activity by making 3D shapes out of clay. Avoid using glue, sellotape and blu tac as these could be harmful to the environment if the child leaves a bit on the floor. Make patterns with different materials and model these to the children. Can they copy you? Can they make their own patterns? Change the activity by handing out leaves and marker pens, and draw shapes on leaves creating a continuous pattern.

Measure activities

There's so much to measure outdoors – take advantage of it!

Start with measuring length. Simply ask the children to find three sticks or leaves and put them in order of length. Then ask the children to hunt for one stick and find objects that are larger or smaller than the stick. Encourage the children to spend some time estimating before they start this activity. Bring rulers and ask the children to measure the length of leaves, rocks and other items in centimetres. Then get them to sort them into piles of 30cm or less.

Move onto measuring weight. Ask children to find three stones and put them in order of weight, from lightest to heaviest. Repeat this exercise with leaves, sticks, rocks and mud. Then get them to use the weighing scales and measure the weight of each object in grams.

Finish with some games on measuring capacity. Give the children lots of play time with water using different up-cycled containers, such as yogurt pots or water bottles, and then write measurements on them with a marker pen. Have discussions asking if the container is full, empty, half full and nearly full. Then move onto measuring in millilitres. If it rains, then this lesson is ready-made for you! If it doesn't, use regular water. Add mud or food colouring for that extra wow-factor!

Home learning



Guess what? Learning is fun!

Your child's setting is passionate about ensuring that children get outside and connect with nature. Apart from all the physical and mental health benefits, studies now show that children are smarter if they play outside! To support this mission, we encourage you to do your bit so that your setting always has cardboard boxes of all sizes, water and pop bottles, bottle lids, glass jar lids and yoghurt pots. All of these items work wonders for creating imaginary places! They also help teach children about the value of reusing materials before recycling them.

Your Muddy task :)

Muddy Party Time!

Throw a Muddy party in the garden and invite teddy bears, dolls and action heroes! Get the children to count how many guests they have, counting forwards and backwards up to 20 if you can. Recycle water bottles by cutting the bottoms off and using tape around the sharp edges to make small bowls. Alternatively you can use old plastic tubs and yoghurt pots no longer needed. Cardboard boxes are also great. Use everyday objects like plates and water bottles, and ask the children to describe the shapes they see.

Then give the children some mud and get them to make some party food.

Ask questions like:

- What will you make?
- How many scoops of mud will you need for that?
- How much food will each person get?
- Have you shared it out fairly?

“LIFE IS A JOURNEY,
NOT A DESTINATION.” –
RALPH WALDO
EMERSON

Did you know?

Studies have shown that children who play out are smarter! Use this link to read more.
<https://childmind.org/article/why-kids-need-to-spend-time-in-nature/>



Congratulations!



To



You have been awarded the
Muddy Maths Award !



SignedDate.....

“LIFE IS A JOURNEY, NOT A DESTINATION.” -RALPH WALDO EMERSON

Message for parents!

If your child likes to learn outside then
check out our parent packs at:
www.themuddypuddleteacher.co.uk