



Pentagon
For Learning and Play



Mud Kitchen

Activities

Our Mud Kitchen is a place for children's imaginations to get creative with cooking mud! With a chalkboard countertop, mixing bowls, integrated chalkboard on the serving side to scribble menus, and hanging and shelf space for pots and pans, it is the perfect place for messy culinary play. The two cupboards can be used as a microwave and oven, with the oven hob drawn on in chalk, or it can be rubbed out and imagined as something else. Making cooking a fun experience, your children will never think of your kitchen in the same way again (minus the mud, of course!).

How to Equip Your Mud Kitchen!

A mud kitchen is simple to set up. Once you have got your mud kitchen in place, all you really need is a few kitchen items and a healthy supply of mud!

If your budget is tight, it is always worth asking parents to donate any old unwanted or unused kitchen items

Here is list of useful items for some additional inspiration and possibilities:

- Cups, plastic cutlery, plates and bowls for “serving”
- Containers and bowls for mixing
- Containers such as jars or tupperware for storage
- Kitchen utensils such as wooden spoons, whisks, spatulas
- Shape or biscuit cutters
- Plastic jugs for transporting water
- Pie tins and tart tins made from foil or metal
- A pestle and mortar for mixing and grinding
- Turkey basters and empty ketchup bottles for sucking up, squeezing and squirting
- Icing sugar and salt and pepper shakers
- Sieves and colanders
- Ice cream scoops
- Potato mashers
- Weighing scales
- Plastic washing up bowls
- Chopping boards
- Old dried lentils, rice, pasta and other pulses or beans

- Old porridge oats
- Glitter
- Jelly or goo
- “Everyday” food item containers such as empty cereal packets, clean sauce jars or tins, empty milk cartons and egg boxes
- A selection of natural resources for adding to potions for texture or decorating mud pies, such as stones, pebbles, gravel, bark, wood chips, seeds, pine cones, conkers, acorns, shells, sand, petals, dried herbs, sticks, moss and dried grass.

How to make mud

The essential ingredient for any Mud Kitchen: mud!

To make basic mud, you just need soil mixed with water. If you haven't got access to a nearby digging area or ready clean soil supply, you can buy bags of cheap sterilized topsoil from most garden centres or online.

Children will love mixing up their own mud using soil, compost, sand and water in whatever quantities they chose for different textures. They can add other materials such as gravel, washing up liquid, shampoo or even glitter for added interest, whatever you must hand!

Even better if your Mud Kitchen is near to a water supply or linked to water based resources such as a Water Wall or Rope and Pulley System, as children will love filling up containers and transporting the water themselves, sloshing it around to make their mud.

Understanding the World

Exploring Properties

Discovering Nature

Making potions and gathering items in a Mud Kitchen offer plenty of inroads for experiencing and discussing nature.

Discuss and let them experience for themselves the changing seasons:

- In Autumn, the school playground will be covered with fallen leaves, acorns and conkers.
- In Winter, if it is cold enough then potions in the mud kitchen will freeze over. Let children explore them, have a go at breaking the ice, and talk about the effects of the seasons on the world around them and changing properties.
- In Spring and Summer all sorts of plants and flowers will be starting to grow. Children can gather grass and petals to make perfume and potions.

They can design recipes and write out recipe methods themselves on the chalkboard with a list of ingredients, quantities and measurements.

They should try and follow each other's recipes too!

A Mud Kitchen is a perfect resource for this area of learning as it allows children unlimited opportunities for exploring properties, colours and textures of "mud".

Try using cold;

- Baked beans
 - Tinned spaghetti
 - Jelly
 - Coloured water either from a warm tap or chilled with ice cubes
 - Shaving foam
- ...or anything else you can think of for children to explore and use their senses

You can include plenty of different natural resources such as fir cones or petals as the seasons change. Children will enjoy discovering how the different ingredients affect properties.



Make Your Own Paint

This lesson idea is a really fun way of incorporating art and design skills as well as developing an understanding of properties and nature.

In summer and autumn, berries and fruits such as blackberries are available in abundance along many pathways. If they can't get to pick their own (a wonderful experience of nature in itself!) then shop bought blackberries, raspberries or strawberries will do.

The method is simple:

- Put the berries into the mud kitchen and set to them with a potato masher! Children can use their hands too, or forks and spoons.
- Add water for different consistencies.
- Children will notice that there are seeds and skin still intact in the paint, which is perfect if you are exploring texture. If not simply strain the squashed berries with a sieve to make a smoother paint.
- Once they are happy with their paint, transfer it into smaller receptacles such as jugs or jam jars.

Why not have a go at making some other coloured paints too?

Children should make predictions and think about what colours they could make and what they could use to make these colours. Ground up grass for green paint, for example.



Role Play

- Allow time for regular role play in a Mud Kitchen:
- Children can be cooks in the kitchen
- Customers in the cafe
- Families cooking a family meal together

There are many different possible interactions, relationships and dynamics in each of these situations which children need to explore in order to understand them and their own place in the world.

Be sure to provide different resources to allow children to explore other cultures.

This could be items such as a wok and some chopsticks, some tapas bowls or an old pasta maker. All of these things originate from other countries and cultures and allow opportunities for open discussion and exploration.

Art and Design

Moving Art

The Mud Kitchen works well as a transient art station, as there is plenty of space to store, mix and display natural loose parts which the children can use for their creations.

Send children on a hunt to gather the raw materials, or use resources you have collected for your Mud Kitchen: Lentils, pasta and pulses, shells, pebbles, moss, sand, seeds, leaves, feathers, anything you can find with different and varied textures, shapes and sizes.

The children should use these resources for sensory art to create patterns or sculptures on the Mud Kitchen surface, or any other surrounding surface that draws their eye.

Ask them to mix mud in the mixing bowls, and add in some of the resources for different textures.

Transfer the mud to seed trays, foil trays or pie tins, to make traditional mud pies, then ask them to decorate them with whichever of the resources they choose. They can use instruments such as sticks, chopsticks, forks or straws to mark patterns in their designs. Use mirrors to catch the light and add different perspectives to their displays.

Pebble people

Using the homemade paint that children have made in their Mud Kitchen, children will enjoy painting faces and characters onto pebbles at the mud Kitchen. Use other art resources such as sticky eyes, pieces of wool for hair to bring them to life.

The pebbles can form a display around the mud kitchen to use as characters for role play, e.g. customers in the restaurant.



Modelling and sculpting

Moving on from modelling with mud and sand, you can introduce other materials such as clay and dough to extend children's learning.

Using the Mud Kitchen as a dough making station allows children to experiment with different materials to make their own dough and create the perfect consistency for modelling.

They can add all sorts of other things to it such as glitter, petals, lentils etc to create different colours, textures and patterns. Use natural resources such as pine cone to make imprints and patterns in the dough. They can make dough "ice cream" or "pizzas" to serve to their friends from the Mud Kitchen!

When they are ready to make more robust permanent sculptures, modelling clay is a brilliant resource to add to the mud kitchen. Give purpose to their work by asking them, for example, to make and decorate cups or plates to serve “food” from the Mud Kitchen.

Acoustic accompaniments

You can enhance a Mud Kitchen area by adding wind chimes, small bells or other items that make sounds when it rains or when the wind blows over them.

This will add atmosphere and further inspire creativity. And with all the pots and pans, spoons and different surfaces on the Mud Kitchen, children can explore making their own sounds and music as they play.

Whilst a metal spoon scraped across a metal colander might not be the most pleasant sound to our ears, it's all part of the creative learning process for children!

Communication and Language

This is an area of learning which can be incorporated into every single activity that children participate in at the Mud Kitchen.



There are no exceptions. Children should consistently be encouraged to listen to others, and to talk about, discuss and describe what they are doing throughout their activities as a continuous part of their development. The best way of going about this is to ask them open ended questions, and encourage them to describe what they are doing as they work through each activity.

As we have said before, there is more to mud than just mud!

Can they describe the different colours, textures and consistencies they are working with?



Observe them communicating with peers as they are enjoying a Mud Kitchen session. It is interesting to see just how much language they learn from each other and how quickly they pick up new vocabulary when they are doing something that they enjoy. They are also learning to work things out, make compromises and negotiate with one another as they engage in Mud Kitchen activities.

Personal, Social and Emotional Development

Role Play

The Mud Kitchen provides a strong familiar link to a child's home setting. Providing a facility for secure familiar play, where children can recreate everyday home scenes and share stories about what they do at home or on trips out, creates important opportunities to observe children.

This helps you note areas where development or discussions are needed, and to allow children to learn how to interact with others, to play co-operatively, and to establish, understand and manage their own feelings. It is a vital way of allowing them to explore a range of emotions in a safe and well supported environment.

They will learn how to take turns, to solve problems, to negotiate, to offer up their own ideas and to listen to other people's ideas and opinions too. It is important that children have the chance to select items and resources for play themselves.

Make sure that you have a rotating supply of items from the above list to use as props, which are easily accessible to the children while they are playing at the Mud Kitchen. You can also include dolls and toy animals to use as family members, customers and pets.

Health and safety

The Mud Kitchen is a great base for talking to children about personal safety and self-care.

Whether it is the risks of using a "hot" oven or water, hygienic food preparation, using kitchen utensils safely, keeping the area clean, or washing their hands, these are valuable everyday life lessons in a safe and fun play environment, which all support a child's personal development. Children will learn how to assess danger and how to work out risk and find their own solutions.



Physical Development

Fine Motor Skills

Development of fine motor skills is a natural part of playing or working at a Mud Kitchen. Little hands are constantly busy, whether manipulating natural materials, using kitchen utensils, pouring and carrying water or digging soil. It all forms part of helping them to develop the muscle strength and dexterity that they need to perform everyday life skills.

A typical structured lesson at a Mud Kitchen will see children:

- Transferring materials from one container to another, filling and pouring, lifting and stretching
- Pinching fingers together, or pinching with tweezers or tongs, to pick up smaller items such as pulses, nuts, sand or any other materials that they are playing with, which requires fine control and manual dexterity
- Mixing, stirring or whisking their concoctions
- Mashing mud or natural materials (usually with force!)
- Foraging around the playground to find natural resources to use in the Mud Kitchen
- Carrying heavier items such as jugs of water or bowls full of mud
- Squashing and crushing mud, fruit or dough, pushing and pulling with their arms and hands as they do so
- Grinding, perhaps in a pestle and mortar, and using their muscles to break down materials to make mud or paint



Gross Motor Skills

Development of gross motor skills come into play as children are running around outside finding items for their Mud Kitchen, carrying heavy containers of soil or water to make their mud.

The more that children are encouraged to set up their Mud Kitchen activities themselves, and to look after it themselves by keeping it clean and tidy when their work is done, the more their muscles are put to use and physical development is allowed to flourish.

Health and Hygiene

Mud Kitchens also offer a good base to discuss personal health and self-care with children. It is important that they wash their hands after playing outdoors, and that they don't try to eat anything that they shouldn't.

Discussions about nutrition and healthy eating can take place at the Mud Kitchen, as children are engaged in role play preparing meals.

Over time children will learn and be encouraged to take more responsibility for keeping themselves clean and healthy if they use their Mud Kitchen properly.

Literacy

Mark making

The Mud Kitchen has chalk board surfaces, so there is plenty of space for children to write down their ideas and practice letter formation and spelling as they play.

Make sure there is always a hearty supply of chalk at the Mud Kitchen so children have easy access to it at all times - they are most open to learning when they are enjoying what they are doing and want to write things down at their own free will. Provide children with different resources for mark making in the mud.

A simple stick will do. They can practice forming letters and words in the mud and the different textures will add interest, as well as helping to strengthen the fine motor skills that children need for writing.

Labelling

Label absolutely everything
you can see in your Mud
Kitchen - if it has a surface,
label it!

You will need to make sure your labels are waterproof. Use symbols and pictures as well as words. It's all about daily familiarity and children will start to recognise word formations.

You can add literature such as laminated menus, herb

identification charts, kitchen safety rules, or anything else you can think of to your mud kitchen, so that children are regularly reading as they play.

Include some labelled recycled everyday items that children might recognise in your Mud Kitchen cupboards, for children to play with and use in role play.

Empty cereal packets, milk cartons, plastic juice bottles, egg boxes and crisp packets can easily be cleaned and used to encourage reading and letter recognition.



Spoken word

The outside environment is in itself the very best place to enjoy stories, reading and rhyme.

You can use the space to take time out for a story, whether reading to children or asking them to read aloud. Pick stories and rhymes about being outside or about food and cooking to support the theme, such as The Gingerbread Man, Pat-a-Cake, Hot Cross Buns, Five Current Buns etc.

Engage children in speaking, singing or acting them out as they play. Flowing on from this, ask children to write their own poems or short stories on the theme.

Creative writing

Ask them to invent and write out their own recipes for concoctions they would like to create in the Mud Kitchen, whether worm pie, stick salad, or soil sandwiches, the more disgusting the better and they will have real fun doing this! They can pool all their recipes together and write up menus on the chalkboards for their own Mud Kitchen cafe.

records and to back up Mud Kitchen maths lessons with use of written symbols and numbers. To make maths lessons extra fun, get your children making some leaf bread! Here's what to do:

Baker's Shop Maths

A simple mix of flour, water, and a few crushed leaves is all you need to make your leaf bread. You can add oats, salt, petals, food colouring or similar to make the recipe more complicated as necessary depending on the children's level of learning.

Ask the children to do the following:

- Follow a written method of instructions setting out quantities of ingredients
- Use weighing scales for weight measurements for dry or solid ingredients
- Use measuring jugs to measure quantities for liquid ingredients
- Mix the ingredients together to form a dough
- Transfer the ingredients to containers of different shapes and sizes to "bake" in the oven. Discuss how to make bigger and smaller loaves, which is the heaviest and which is the lightest
- Adjust quantities to make more dough or less dough. Can they re-write the recipe to make 2, 5 or 10 times as much dough?
- Design their own recipes for their own imaginary baked item, such as pebble scones or acorn cake, and write out a method with quantities
- Role play selling their breads and cakes in the Mud Kitchen bakery. Work out prices for each item in pounds and pence. Children can use toy money to count out how much they need to buy a loaf of leaf bread. If you buy 3 loaves at £1.50 each, how much money do you need? Don't forget your change!



Mathematics and Numeracy

There are endless opportunities for counting whilst children are playing at a Mud Kitchen. You can store lots of loose parts in containers in the Mud Kitchen, mainly items that the children will have collected themselves, such as acorns, pebbles and stones, twigs, leaves, conkers, pine cones, feathers etc.

Counting, removing items for subtraction, and grouping items for multiplication and division, is a regular exercise that can form part of any activity in the Mud Kitchen. Use the chalk boards to write up



Find out more...

If you would like to set up a [Mud Kitchen](#) or a [Mini Mud Kitchen](#) in your school playground or are interested in discussing the development of your outdoor environment, simply fill out our [Contact Form](#) and we will be in touch with you to book a free consultation.

To find out more about our unique process as well as view our full range of outdoor resources, [case studies](#) and educational [blogs](#), make sure to visit our website at www.pentagonplay.co.uk