



# A Beginner's Guide To SENSORY PLAY

SIMPLE DIY  
RECIPES & IDEAS  
FOR SENSORY  
PLAY AT HOME

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# INTRODUCTION

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Hello I'm Laura, a former early year's teacher and mama behind Inspire My Play! I'm a huge advocate of play-based learning and love creating playful experiences for my own kids. I'm especially passionate about the benefits of sensory play in early childhood. So much so that I decided to design a product to make it easier to engage in sensory play at home! Creating the PlayTRAY was a labour of love and it is wonderful to see so many children enjoying playful experiences in them! You can learn more about it on our website: [inspiremyplay.com](https://inspiremyplay.com).

If you've downloaded our ebook I'm guessing you're keen to realise the benefits of sensory play for your little ones too! To help you get started, I've pulled together a variety of my favourite recipes & play invitations into one handy e-book! I hope it provides you with lots of inspiration!

For more sensory play ideas, do come and join us over on social media at @inspiremyplay. I know you will have many incredible ideas of your own that we would love to see! Please do tag us or use the hashtag #inspiremyplaytray for a chance to feature on our page.

Happy tray-playing!

## Why is sensory play so important?

In early childhood children use their senses to explore and make sense of the world around them. They do this by touching, tasting, smelling, hearing, seeing and moving. When a child actively engages their senses, this learning is embedded and memorable.

In fact, providing opportunities for children to explore their world through sensory play is crucial to brain development- it helps to build nerve connections in the brain's pathways.

Sensory play benefits problem-solving skills, language development, fine motor skills and social interaction. There are also many calming and therapeutic benefits to sensory play. Besides all this, it's simply a lot of fun!



## Section 01

# THE PRACTICALITIES OF SENSORY PLAY

It is no secret that sensory play, even in a tray, can get messy! That beautifully-set up tray, lovingly prepared can be everywhere in minutes and we're left feeling frustrated and disappointed!

So how do we temper our expectations yet ensure that sensory play doesn't become something that we dread? Here are a few tips that I have learnt over the years-often the hard way!

### Pick your moment well

If you're already feeling overwhelmed by the pressures of the day, it may not be the right time to complicate things with some messy sensory play! Save messy play for slow days and choose your timing carefully. Just before a bath works well or before a meal, snack or TV time so that the kids are occupied whilst you put things away.

### Be realistic

Whilst you'll find many photos of beautiful play tray set ups across the internet, the reality is that they don't

stay looking that way for long. By all means enjoy setting up inviting trays- it's a great way of capturing a child's interest and imagination, but understand that they *will* want to play with it!

A child's natural inclination is to investigate, test ideas and experiment. When they mix the oats with the water it may make you wince, but this is what curious kids do! So try to let go of any pre-conceived notions and focus on the memorable experiences you are giving them.

### Keep it simple

Not every sensory play experience needs to be elaborate. In fact, often the simplest of set ups are the most engaging for children. Children often need and enjoy repeat experiences, so don't be too quick to move on to the next idea.





## Use a cloth or sheet to catch the mess

An old bed sheet, shower curtain or table cloth laid on the floor is a really useful way of catching any stray sensory materials. It also defines a play area or boundary for your child to keep within whilst playing.

Bed sheets are particularly easy to gather up things such as rice and oats and return them to the tray. A tablecloth is useful for protecting carpets from messy materials, like shaving foam. If we are doing any sort of water play, I usually put the tray on a large towel to absorb water that overflows.

Whether you choose to place the tray at floor level or at a low table may vary depending on the activity. Dried materials like rice and cereals tend to travel quite far when dropped from height, so the floor may be preferable. Conversely, you might find 'wet' activities are best done at a table so only their hands are in the tray! Obviously, this depends on the age of the child and their ability to sit or stand at a table and play comfortably. Most baby and toddler play is more practical on the floor and they may like to explore with their whole bodies!

## Wear old clothes

Get your kids in old clothes, particularly when playing with activities involving food colouring or messy activities like oobleck and cloud dough. It will stop you from feeling anxious about them getting messy and make the whole experience more enjoyable for everyone!

## Have a bowl of water and a towel to hand

You may find that when playing with particularly messy materials, such as shaving foam and oobleck, children often want to wash their hands. This is completely normal and to be expected. By having a bowl of clean water to hand it helps them feel more comfortable with the experience and confident to get messy. It also means the mess stays in a defined area rather than having to move to a sink to clean it off.

## Involve your child in clearing up

As much as possible involve the kids in cleaning up sensory play. Most children love the novelty of washing up or using a dustpan and brush and it teaches them such important skills for the future. Give them a bowl of soapy water placed at their level to wash up tools and utensils and a towel to lay them on to dry.

## Take sensory play outside when possible

Taking your play outside whenever possible will save on the time it takes to clear up and may just save your sanity! If you're hoping to re-use the sensory material, lay the tray on a mat or picnic blanket first.





## Set clear boundaries

Whilst we need to accept there will be *some* mess with sensory play, we can, and should, set boundaries that keep things within a level that we, as adults, feel comfortable with. This will vary somewhat for different people, but the key is to communicate these boundaries clearly and be consistent in enforcing them.

Do make sure you sense check your expectations- a child of one will not have the same ability to keep the sensory material in the tray as a four year-old. The more experience of sensory play children have, the more likely they are to understand how to play within the limits.

Think about resources too- are you happy for them to grab whatever they like and add it to the tray or are they to use only the tools/ animals/ equipment you've pre-selected? Setting this expectation beforehand saves the frustration when you realise they've just emptied the contents of your kitchen drawer into a tray of oobleck!

And what about those that keep dumping or throwing sensory materials? This is quite a common experience, particularly with toddlers. Be clear that this is unacceptable and what the consequence will be- "We will have to put the lid on the tray until you are ready to try again".

One of the very best ways to help a child understand the boundaries of sensory play is to play alongside them, particularly when introducing something new. Model how to enjoy sensory play whilst keeping within the limits set, giving them occasional verbal reminders and offering them plenty of praise.

# RESOURCES

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There are many items that you will already have at home that can be used for sensory and small world play. Utilise these first before spending out on huge amounts of additional resources. We've built up our collection over time, adding a few new items each month.

There's also an abundance of ways you can use natural materials to enhance your play set ups. Start creating a small collection of natural materials such as pebbles, rocks, shells & pinecones that you can have to hand when needed.

I've created a list of key resources to gather over time. For details of some of our favourite products we use with the PlayTRAY please check out our resources page on the website ([inspiremyplay.com/pages/resources](https://inspiremyplay.com/pages/resources)).

Kitchen staples:

- Rice
- Spaghetti
- Dried beans
- Oats
- Cereal
- Flour
- Cornflour (Cornstarch)
- Cream of tartar
- Coconut oil
- Vegetable oil
- Food colouring
- Bicarbonate of Soda (Baking Soda)
- Salt





Other sensory play staples:

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- Biodegradable glitter
- Ready Mix Paint
- Essential Oils
- Pom-poms or felt balls
- Water beads
- Shaving foam
- Sand or kinetic sand

Equipment & Utensils:

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- Scoops
- Bowls
- Funnel
- Whisk
- Tongs or tweezers
- Silicone cupcake cases
- Small colander
- Plastic bottles
- Spoons
- Measuring cups
- Cookie cutters
- Ice cube tray
- Spray bottle
- Droppers/ pipettes

Natural materials:

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- Leaves
- Twigs
- Plants
- Pinecones
- Acorns
- Pebbles & rocks
- Shells
- Herbs
- Flowers
- Small logs
- Wood slices

Small world resources:

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- Artificial grass offcuts
- Artificial greenery (aquarium plants work well)
- Artificial flowers
- Artificial snow
- Animal/dinosaur figures
- Vehicles
- Polished glass stones
- Mini bricks







Section 02

## RECIPES

There are so many sensory play materials to choose from it is sometimes difficult to know where to begin! There are many that can be transferred straight from packet to tray-perfect if you are short on time. Others require a little bit of preparation.

I've selected 5 of our favourite sensory recipes that are definitely worth the extra effort to make. And stored correctly, some will last several months, if not longer for repeated play experiences.

# PLAYDOUGH

Play dough has never failed to entertain my kids or the children I have worked with over the years. There are so many creative ways to present play dough and the learning opportunities they offer are immense! Playing with play dough builds fine motor skills, creativity and imagination, whilst boasting many sensory and therapeutic benefits too.

Traditionally play dough is cooked on a stove-top or hob but this no-cook version is quicker and easier to involve the kids in, yet still turns out smooth and squishy! No-cook play dough is now the only way I make play dough.

If you intend on making several batches of play dough I really recommend buying cream of tartar in bulk as the small packets in the supermarket are not cost-effective.

Make sure you store your playdough in an air-tight container. If you are storing it long term in the PlayTRAY we recommend wrapping it in cling film first to minimise the air trapped inside the PlayTRAY degrading it.

I choose to use coconut oil when making play dough as I find it less drying on delicate skin. It also makes the play dough smell great! If you don't have any coconut oil to hand though, vegetable oil or even baby oil can be a substitute.





## Ingredients

- 1 1/2 cups of plain flour
- 1/2 cup of salt
- 2 tablespoons of cream of tartar
- 2 tablespoons of coconut oil (or vegetable oil)
- 1 cup of boiling water
- Food Colouring (optional)

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## Method

1. Combine the flour, salt, cream of tartar and coconut oil in a bowl.
2. Add the food colouring to the boiling water and then pour this into the bowl with the other ingredients. If you are making this with children take care at this point and keep them at safe distance.
3. Mix all the ingredients together until it starts to come together as a dough.
4. When the dough has cooled slightly take it out of the bowl and kneed it really well. This is the most important part so it's worth taking time over it and getting the kids to help.
5. You are now ready to play!

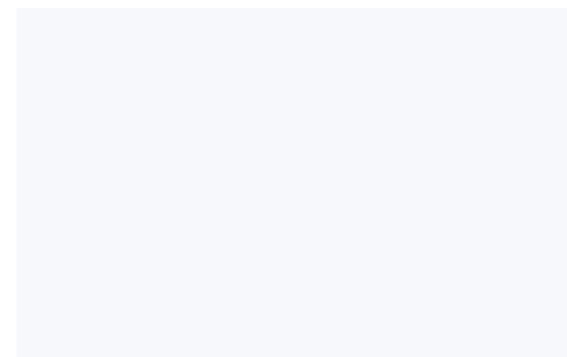
There are so many ways to enhance play dough...



## Dried Flowers

Add a handful of dried flowers to the play dough mixture to give a beautiful look and smell to your play dough!

A favourite of ours is lavender play dough. If you want extra scent just add a couple of drops of essential oil.





## Sand Play Dough

Adding sand to play dough creates a really interesting, fun texture that's perfect for beach themed play or a builder's site. To make sand play dough add 1 1/2 cups of play sand to the regular play dough recipe.

To prolong the life of your sand play dough make sure you use clean, unused play sand. Depending on how dry the sand is, you may need to add additional water to the recipe. If the play dough feels too crumbly add more boiling water in small increments until it comes together well as a dough. If you over do it, just add a little more flour until it loses its stickiness.

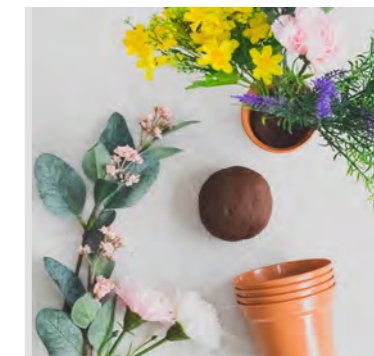




## Cocoa Powder

Chocolate play dough is a wonderful sensory experience that kids love! It's perfect for pretend baking play and also makes authentic looking mud!

To make chocolate play dough add 1/2 a cup of cocoa powder to our regular play dough recipe. You don't need to add any food colouring for this one as the colour comes from the cocoa powder. You may need to add a little more water if it feels too dry.



## Spices or Herbs

Spices can add a lovely smell and colour to play dough. Gingerbread play dough is probably one of our favourites! Simply add 1tbsp of Ginger and 2tbsp of Cinnamon to our regular recipe.

Herbs such as sage, mint or rosemary also smell lovely and add an interesting texture to play dough.



## DYED RICE

Dyed rice has to be one of our favourite sensory materials. The colours look amazing and it's perfect for scooping and pouring activities. Dyed rice takes minutes to make (plus time to dry) and best of all it lasts indefinitely if kept dry and in an air-tight container.

There are two main methods for dyeing rice- paint or food colouring. Using paint is the easiest method and yields beautiful bright results! But if you have a young child who is still mouthing objects, colour your rice with food colouring to make it taste-safe.

You can enhance your dyed rice by adding essential oils. One of our favourites is to add lavender essential oil and sprigs of dried lavender to purple rice. Do be aware that adding essential oil means that it is no longer a taste-safe option.





## Ingredients & Equipment

Uncooked rice  
Ready Mix paint or  
Food Colouring and White Vinegar  
Ziploc Bag  
Baking Tray

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## Method

1. Place the uncooked rice in a sealable bag.
2. Add a couple of squirts of ready mix paint.
3. Shake the bag vigorously and scrunch it with hands until the rice is covered. If needed, add a little more paint until the rice is completely covered.
4. Empty the contents of the bag on a tray to dry.

## Food Colouring Method

If you need a taste safe alternative, food colouring is the method for you! Essentially it's the same process just instead of paint, add a few drops of food colouring and 1 tbsp of white vinegar. The vinegar disperses the food colouring and helps it stick to the rice.

These methods can also be used to colour chickpeas or oats for sensory play.





## CLOUD DOUGH

Cloud dough, also known as moon sand, is a combination of oil and flour. It creates a powdery substance that is also able to be moulded and shaped, making it a lot of fun for kids!

There are so many ways to use cloud dough, not least by simply adding some cup cake cases and allowing them to enjoy some pretend play baking. We also love this for small world play- it works particularly well for a moon scape!

Like most sensory materials, there are some easy variations to the standard recipe. One of our favourite is chocolate cloud dough. To make chocolate cloud dough, substitute one of the cups of flour for a cup of cocoa powder instead.

Chocolate cloud dough works perfectly as pretend soil for a planting tray or even as chocolate ice cream with some cones!

Another cloud dough variation is to add spices like ginger and cinnamon.

Cloud dough can get quite messy, particularly the cocoa variety, so wear old clothes and pop an old sheet on the floor.

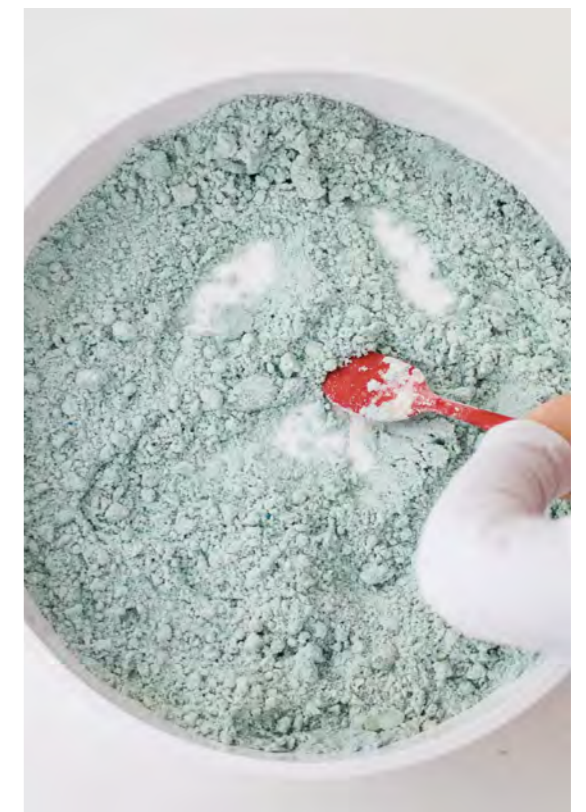
There have been some instances where E-coli has been detected in raw flour. If you suspect your child may try to eat the flour it is best to bake it in a pre-heated oven for 10 minutes at 180C/ 350F to kill any bacteria that may be present.

## Ingredients

4 cups of flour  
1/2 Cup of Vegetable Oil  
Grated Chalk/powdered paint (not taste-safe) or  
Powdered food colouring (taste-safe)

## Method

1. Lay the flour on a baking tray and bake for 10 minutes at 180C/350F
2. Once cool, add the flour to the tray.
3. Take a stick of chalk and grate it into the flour. Alternatively you could use powdered paint or powdered food colouring (sometimes called food dust).
4. Stir in the oil and mix until the ingredients are well combined.







## BUBBLE FOAM

Bubble foam is so much fun! It's a great one to take outside on a warm day and is easy to clean up too.

Bubble foam works fantastically as a frothy ocean with some animal figures. We also loved making this beautiful, calming lavender version with purple food colouring and lavender essential oil.

To this we added silicone cake cases, plastic ice cream cones and scoops and they happily spent time making foam cakes and ice creams.

### Ingredients

1/2 cup of tear free Bubble Bath  
1 cup of water  
Food colouring (optional)  
Essential oil (optional)



## Method

1. Measure out 1 part tear free bubble bath (or washing up liquid) to 2 parts water into a bowl. We usually do 1/2 cup of bubble bath and 1 cup of water at a time. You might need to do a few batches to fill the whole tray.

2. Add some food colouring and/or essential oil at this point if you are using some.

3. Blend it together using an electric hand mixer or stick blender until you start to get stiff peaks. Scoop out the foam into the tray.

In the bottom of the mixing bowl you're likely to get some liquid that hasn't turned to bubbles. Once you've removed the layer of bubbles simply use the mixer to blend the rest of the liquid and this should create another big batch of bubbles.

If you want to revive your bubble foam when they've been playing for awhile, simply pour it back into the bowl and mix it again.





## OUBLECK

Oobleck is a non-Newtonian fluid, which means it acts as a liquid one minute but turns to a solid under pressure! It's an amazing sensory experience, but a little messy so I recommend you do this one in old clothes!

Oobleck is best experienced with their hands so they can feel the changes from liquid to solid and vice versa. A thin layer of oobleck is great for setting up mark making experiences and practising letter formation.





## Ingredients

3 Cups of Cornflour  
3 Cups of water  
Food colouring (optional)

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## Method

1. Measure out the cornflour and add to the PlayTRAY.
2. Measure out three cups of water. Add a couple of drops of food colouring if you would like to at this point.
3. Combine the water with the flour and mix.

## Section 03

# BABY AND TODDLER PLAY

Even our littlest learners can benefit from sensory play experiences! At this age it's best to keep activities as simple as possible. Their attention spans tend to be quite short and so there is little point spending a long time setting something up that only holds their attention for 10 minutes!

The PlayTRAY shallow tray is great for setting up those early sensory experiences, like a few ice cubes to feel or some jelly to squish with their hands. At about 9 months they may be ready for something a little more involved.

Materials that can be scooped or poured start to become fascinating and it's a great time to start exploring taste-safe and edible sensory play.

It goes without saying but please do make sure that whatever you set up for your baby or toddler it is closely supervised and age appropriate. Please do not use items that could be a choking hazard.



# PEAS AND SWEETCORN

This is the easiest of set ups but lovely for little ones to explore! This one is great for babies who are developing their pincer grasp (thumb and index finger) as they can practice picking up the individual peas and sweetcorn. Add scoops and bowls to encourage filling and emptying. You could even challenge an older child to sort the peas from the sweetcorn!



Materials:

Cup of Peas  
Cup of sweetcorn  
Water  
Scoops, spoons & bowls

Age suitability:

9 months +

Areas of learning:

Fine motor, problem solving



## HIDE AND SEEK

In the first year of your child's life they will be learning about object permanence. This is the understanding that objects can still exist even if they can't be seen or felt. A hide and seek tray is the perfect vehicle to explore this.

Oats are a great sensory material to play hide and seek with as they are edible and store well for repeat experiences. You can even dye oats with food colouring, like you would rice, if you wish.

Simply bury the objects in the oats and invite them to find them. You could choose objects that are special to them or choose ones that are particularly interesting to explore once they've been found.

Materials:

Oats  
Objects to hide  
Scoops  
Bowls

Age suitability:

9 months +

Areas of learning:

Problem solving

# CEREAL AND DIGGERS

Materials:

Different types of cereal  
Diggers  
Any other related resources that are age appropriate

Age suitability:

12 months + (without small parts)

Areas of learning:

Fine motor, speaking & listening, pretend play/ story telling.

This construction site is a huge hit with kids of all ages, but it's a particularly good one for older babies and toddlers because it is edible and doesn't pose a risk if consumed.

Cereal, with its varying shapes, sizes and textures is just brilliant for transporting using vehicles. You could add other items to the tray too to enhance the small world such as road signs or cones. Do make sure, whatever you add, your child can play with it safely.



# SPAGHETTI PLAY

This is the perfect activity to try if you've cooked too much spaghetti one mealtime! It's a fascinating texture for little ones to explore and can double up as a snack too!

You can make cooked spaghetti more enticing to explore by adding colour to it. To do this, place it in a sealed bag and add a couple of drops of food colouring and a dash of water. Shake and scrunch the bag until the spaghetti is covered and leave it to stand for 5 minutes. Then finally rinse it with water using a colander to get rid of any excess colouring.

In the early days a simple tray of spaghetti is enough for a baby to explore, but as they get a little older you can make the tray a bit more elaborate.

To make this ocean variety, split up the batch of spaghetti into 4 and dye with varying amount of blue and green food colouring. We added sea creatures to provide an element of interest and encourage pretend play. Shells are really fascinating to explore with older kids as well, just be sure to wash them well first.

Materials:

Spaghetti  
Food Colouring  
Animal figures (optional)  
Shells (optional)

Age suitability:

9 months + (with small shells removed)

Areas of learning:

Fine motor, speaking & listening







## Section 04

# PRETEND PLAY

The opportunity to engage in pretend play is so beneficial for children. It helps them make sense of their world, improves their vocabulary and fosters social skills.

The PlayTRAY particularly lends itself to setting up some beautiful small world invitations. We are huge fans of these and I'd happily spend all day creating them for my kids!

As with most set ups, start simple for younger children and add more

resources for them to engage with as they get older.

The PlayTRAY compartments are great for making mini-small worlds. We particularly like to use them to make different habitats for animals.

For inspiration about what resources to start collecting for small world play, check out our resources list on page 15.





# MOON CLOUD DOUGH

This moon themed PlayTRAY is one of our favourite ways to use cloud dough, and is the perfect way to imitate the surface of the moon!

To make this, start with one batch of cloud dough using our recipe on page 37. We used a small piece of charcoal to colour our cloud dough grey but please be aware this means that your cloud dough is no longer taste-safe. We also added bio glitter for some extra sparkle! An alternative taste-safe option is to use powdered food colouring.

Other items I added to this tray were some stones, glass pebbles and a set of space figures from a company called Safari. Their 'toobs' range has some great sets of figures for small word play.



Materials:

1 Batch of Cloud Dough natural or coloured grey (see page 37)  
Pebbles  
Glass stones (age 3+)  
Space figures  
Scoops

Age suitability:

3 years Story-telling, speaking & listening, knowledge & understanding of the world.  
+ with close supervision due to small parts

Areas of learning:

Fine motor, story-telling, speaking & listening, knowledge & understanding of the world.



# FARM SMALL WORLD

We love using the tray sections to create different environments for small world play! This farm play tray provides so much to explore and the different bases make for a rich sensory experience for children.

The sensory bases we've used here are simply suggestions- use what you already have in your cupboards or natural materials from outdoors. If you don't have any artificial grass you could use real grass or a piece of felt cut to size.

For younger ones, the sections may be a little too small for them to play effectively in. I suggest starting with just one or two sensory bases for their farm set up in the large tray.

Without a doubt the favourite part of this tray tends to be the muddy pig enclosure, so that could be a good place to start.

To find out how to make edible mud see our toddler activity on pages 56-59.





Materials:

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Age suitability:

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Areas of learning:

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Segment 1: Edible mud (see pages 56-59)  
 Segment 2: Corn kernels  
 Segment 3: Artificial Grass  
 Segment 4: Oats  
 Segment 5: Water coloured with blue food colouring  
 Segment 6: Straw  
 Farm animal figures  
 Pebbles

3 years+ but could be simplified for younger children.

Story-telling, speaking & listening, knowledge & understanding of the world.

# PLANTING TRAY

Black beans, along with other pulses such as lentils and chickpeas provide a quick solution for sensory play set ups. Mine particularly love how black beans feel to scoop and pour. They also work well for space themed play or as soil in a planting tray.

To set up this flower planting tray, use a base of black beans for the soil. Then add a variety of artificial flowers that they can enjoy arranging and flower pots to plant the flowers into.

There are many learning opportunities associated with this, such as using the vocabulary of capacity (empty, full etc..) and counting the number of flowers in each flower pot. You could also extend this scenario to set up a pretend florists or garden centre. They could price up their potted flowers and sell them in their pretend shop. Alternatively you could change the flower theme for vegetables. Planting real or pretend carrots is always a fun scenario!

Please note, raw beans can be toxic if eaten in large amounts so please don't use them with younger children who may be tempted to put them in their mouth. Also, some of the larger pulses such as chickpeas could pose a choking hazard to younger children.

Black Beans  
Artificial flowers  
Flower pots  
Old seed packets  
Scoops

Materials:

Age suitability:

3 years+

Areas of learning:

Fine motor, knowledge & understanding of the world, counting, capacity





Another favourite theme for small world play is the ocean! This is a simple set up involving water coloured with a drop of food colouring. You could pre -arrange your tray or set out the resources in the PlayTRAY compartments and let them create their own ocean environment.

You can make this safer for younger children by removing the glass stones and other small pebbles and shells.

## OCEAN PLAY

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**Materials:**

- Ocean animal figures
- Glass Stones
- Pebbles/ rocks
- Artificial plant greenery
- Shells

**Age suitability:**

3 years+ but could be adapted for younger children. Always supervise your child closely when using water in the PlayTRAY.



**Areas of learning:**

Story-telling, speaking and listening, knowledge & understanding of the world.





# MINIBEAST HOMES

Insects and minibeasts are always fascinating for little ones and this play tray is a great way of exploring and comparing their different habitats with young children.

As always, I suggest using whatever you already have at home to set up these small world environments. In fact, many of the resources used here can be obtained from the garden or from a walk.

- Segment 1: Green garden leaves
  - Segment 2: Soil or portion of chocolate cloud dough (see page 37)
  - Segment 3: Hedge cuttings and flowers
  - Segment 4: Pebbles, water coloured with blue food colouring and leaves cut to the shapes of lily pads.
  - Segment 5: Artificial grass and daisies
  - Segment 6: Dried leaves, pinecones and wood slices
- Insects & Minibeast figures

Materials:

Age suitability:

3 years+

Areas of learning:

Knowledge & understanding of the world.









# LEARNING FOCUSSED TRAYS

I hesitated to know what to call this section because I believe every play tray set up has learning value! But sometimes we want to particularly work on a key skill with our child and that's where a focussed learning tray can be useful.

It can be tempting, especially when kids hit a certain age, to think they've outgrown this type of play and ought to be learning through more conventional methods like flashcards and worksheets. But all the evidence suggests that active learning and learning that engages our senses, is more likely to be retained.

Besides that, learning in playful contexts is more fun! And if it's more fun, it is likely your child will engage more with the learning task! I know my kids would rather hunt and read key words hidden in a tray of rice than read them off a page!

I've shared a few simple tray ideas to get you started but it is no means exhaustive. Most can be adapted to whatever your learning focus might be.



## HIDDEN LETTERS OR WORDS

The idea behind this activity is simple- to make letter & word learning more fun! These letters are covered by a batch of dyed rice (see pages 30-33) but you could swap the rice for another sensory base such as lentils, black beans or salt.

Although the PlayTRAY lid also doubles up as a whiteboard, in this scenario I suggest writing out the words on a large piece of paper and sticking it to the tray, as too much vigorous brushing will probably result in the letters or words being wiped off!

Give your child a paint brush or pastry brush to find the letters beneath the rice and identify them as they find them.

You could hide all manner of things so don't be put off if your child isn't ready for letter learning. For younger children you could replace it with colours or pictures to practice key vocabulary. You could even hide photos of family members to find!





Materials:

Pen  
Paper  
Tape  
Rice  
Paintbrush or pastry brush

Age suitability:

3 years+ depending on the learning focus

Areas of learning:

letter recognition, sounding & blending, sight word recognition

# MARK MAKING

Mark making is an essential early step in the journey to becoming a writer. Lots of playful mark making experiences is of huge benefit to kids before moving on to pen and paper. Not only are they essential for developing the necessary fine motor skills and hand strength needed for writing, they also give kids the chance to practice the shapes associated with forming letters. And if you have a child who is reluctant to put pen to paper, mark making trays provide the opportunity to practice free of the fear that's often associated with 'getting it wrong' on paper.

This particular mark making tray is a thin layer of shaving foam with a drop of food colouring added to it. The food colouring enables the marks to be seen easily against the white of the tray but alternatively you could cover the base of the PlayTRAY with a piece of coloured paper (laminated would work well) and leave the shaving foam white. We added a sprinkle of bio-glitter too to give it a lovely sparkle!

As well as practising pre-writing marks, this sort of tray can also be used to practice letters, numbers or spelling.

Materials:

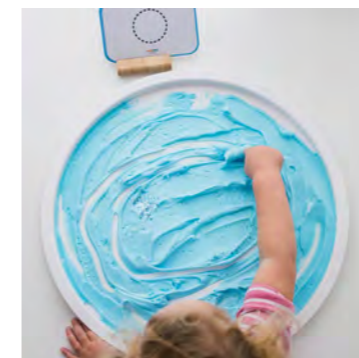
Shaving foam  
Food colouring  
Bio glitter (optional)

Age suitability:

2 1/2 years + or whenever they can play without putting it in their mouth

Areas of learning:

Fine motor, hand strength, mark making, letter formation, shape



# JELLY DIG

Here's another way to make learning letters a little more exciting!

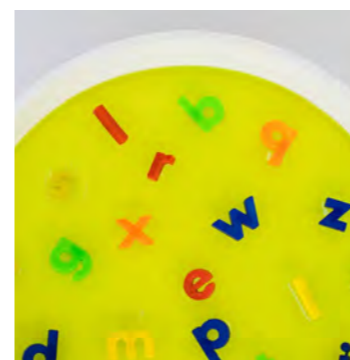
Prepare 3 pints of gelatine as per the packet instructions. Add a drop of food colouring of your choice, stir and pour into the PlayTRAY. You could use jelly instead of gelatine for this but please be aware some of the colouring agents in the jelly could stain the tray.

Once the gelatine has set a little, but not completely, add plastic letters (or numbers) to the tray. They should be held in the suspension rather than sinking to the bottom.

Leave the gelatine until it has completely set and then give the children tweezers or tongs to dig out the letters. They can either name the letters as they are digging or use them to create words to match an object or picture.

Once the activity is finished keep the jelly in the tray for a few days with the PlayTRAY lid on and you can use it for another set up, like a small world or sensory play.

You can make this suitable for younger children by removing the letters. Instead you could set plastic animal figures in the jelly or anything else they might like to excavate!



Equipment/ supplies:

Gelatine  
Food colouring  
Plastic letters or numbers

Age suitability:

3 1/2 years +

Areas of learning:

letters, spelling, fine motor



# LUCKY DIP

Kids love to hunt for things lucky dip style! So why not create one with a learning focus. We've enjoyed many lucky dips with our PlayTRAY. Simply fill it high with a sensory base (whichever you have most of) and bury your chosen objects.

One way we've enjoyed this is with these number pebbles I made. The idea was to match the number pebble to the quantity pebble. These were made using acrylic pens to draw on beach pebbles.

Alternatively invite your child to hunt through the rice to find a number. Can they now count out the correct number of objects to match?

Numicon is a great mathematical tool that works really well in sensory play. If you've not heard of it you can learn more about it on my blog.

Materials:

Rice or other sensory material (sand, oats etc)  
 Number pebbles, plastic numbers, number cards, Numicon

Age suitability:

3 1/2 years +

Areas of learning:

Number recognition, counting, subitising.







Section 06

# SIMPLE SCIENCE

I couldn't write this book without sharing a few science-based play activities! There are some really simple ones that can be set up in the PlayTRAY that kids will love and will encourage them to investigate and explore.

Most of these are aimed at over 3's, mainly because tools such as droppers require well-developed fine motor skills. However, we can still

foster an early love of science in our littlest learners. One of the very best ways is of course through sensory play! What better way to let them explore cause and effect, observe patterns and grow into curious kids!





# FIZZY OCEAN

When vinegar mixes with bicarbonate of soda (baking soda) it creates a fun fizzy reaction that kids love! There are many ways you can play with this reaction and it doesn't ever seem to grow old! If you fall in love with fizzy activities like us, I recommend buying bicarbonate of soda in bulk.

1. To set up a fizzy ocean, place a thin layer of bicarbonate of soda in the bottom of the PlayTRAY.
2. Create your ocean habitat on top with rocks, shells and animals.
3. Fill a jar two thirds full with vinegar and top up with water before adding blue food colouring.
4. Give the kids some droppers to transfer the vinegar to the tray.
5. Enjoy watching it froth and foam as they turn the bicarbonate of soda into an ocean!

Materials:

- Bicarbonate of soda (baking soda)
- White vinegar
- Food colouring
- Droppers
- Pebbles/ rocks/ shells
- Animal figures

Age suitability:

3 years +

Areas of learning:

Fine motor skills, colour mixing, scientific inquiry.

# COLOURFUL ICE

In this activity science and art collide to produce some stunning results! Creating ice art is great fun and fascinating to observe as the ice melts and the colours mix.

Since there are so many fun and playful activities involving ice we designed the PlayTRAY to be freezer safe. The trays will fit in a standard size freezer. The best way to achieve this is to remove the bottom drawer from your freezer and insert the play tray on the flat surface. If you are using the shallow tray it is easier to add the water with a jug once the tray is in situ.

If your freezer isn't big enough to take the tray, you could freeze water in one of the segments or leave the tray outside on a cold night. We don't recommend leaving the PlayTRAY outdoors long term as the plastic may degrade but the occasional night shouldn't be a problem if the temperature isn't too extreme.

To create these colourful ice canvases we used coloured water and transferred it to the ice using droppers. This is a fun, exploratory way of making art and if you sprinkle the surface of the ice with salt first it creates lots of interesting crevices to observe as they fill with coloured water. If you want to you can even create an earth like we did using green and blue coloured water!

Little children may struggle using droppers so for a simplified version of this activity use a paintbrush to paint the ice with water colours or concentrated food colouring.



Equipment/ supplies:

Food colouring  
Droppers  
Salt

Age suitability:

3 years +

Areas of learning:

Colour mixing, scientific inquiry, fine motor skills.



# MAGIC MILK

Magic milk is a simple science experiment that is so fascinating to watch! Magic milk is actually a chemical reaction between the fat molecules in the milk and the dish soap that you add. Normally you wouldn't be able to see this reaction but where you have added food colouring you now see swirls and patterns formed as the molecules move around the tray.

You can add any colour food colouring to this experiment but I tend to use complimentary colours, otherwise you quickly create a brown mess in your tray! For this wintery version we added snowflake cookie cutters and used blue and purple food colouring. It created some beautiful swirls and patterns!

## Method

1. Pour about 1/2cm of milk into the tray.
2. Add some drops of food colouring dotted around the tray and cookie cutters if you would like.
3. Fill a small dish with soap.
4. Dip the cotton bud into the dish soap and then gently touch the spots of food colouring.
5. Enjoy watching the swirls!

Materials:

Milk (ideally full fat)  
 Washing up liquid/ dish-soap  
 Cotton bud/q-tip  
 Food Colouring  
 Cookie cutters (optional)

Age suitability:

3 years +

Areas of learning:

Scientific inquiry, colour mixing

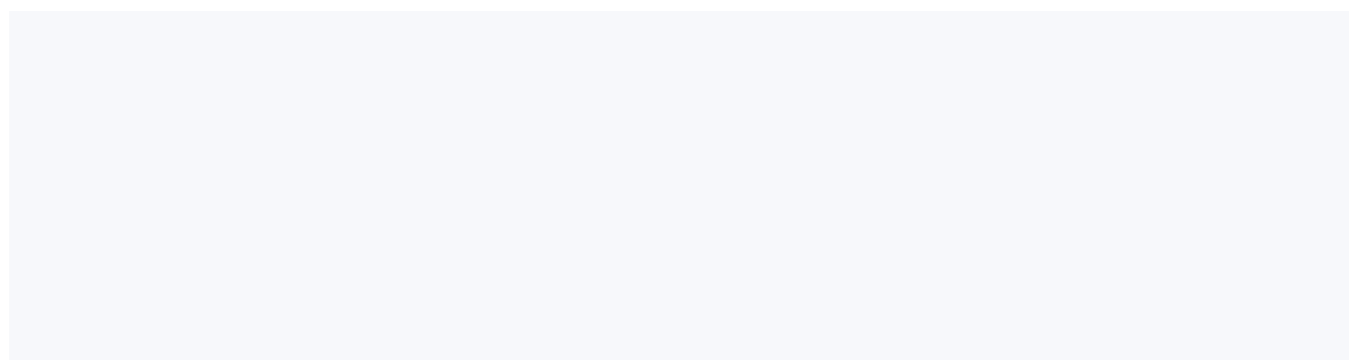
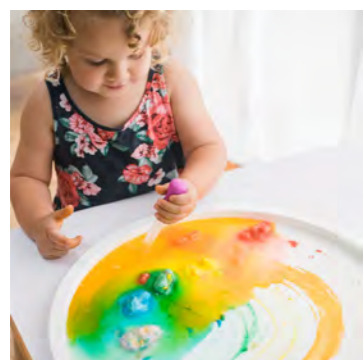


# FIZZY ICE CUBES

Another fizzy experiment with a twist- the bicarbonate of soda is frozen as ice cubes! Not only does that add another sensory element, it prolongs the fun a bit longer! It's also great fun to watch the colours mixing as the ice cubes slowly melt.

## Method

1. Mix 2 cups of bicarbonate of soda (baking soda) and 1 cup of water in a bowl to make a paste.
2. Divide the mixture up in an ice cube tray and add a drop of food colouring to each one. Stir it in using a cocktail stick.
3. Put it in the freezer overnight.
4. Pop the cubes out onto the tray and provide a pot of white vinegar and a dropper.
5. Enjoy the fizzy fun!





Materials:

Bicarbonate of soda (baking soda)  
White vinegar  
Food colouring  
Ice cube tray  
Dropper or squeezey bottle

Age suitability:

3 years +

Areas of learning:

Scientific inquiry, colour mixing, fine motor



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