

Welcome to our schema booklet

Inside you will find out what schemas are, how to spot them and some ideas to help you understand and support your child's learning through play.

This booklet is intended for parents of babies and young children under 5. The suggested activities, experiences and opportunities are ones that can easily be done at home with everyday household objects and materials.



What is a schema?



Schemas are patterns of repeated behaviour that children demonstrate when they are exploring the world and trying to find out how things work.

"It is best to think of Schemas as being a cluster of pieces, which fit together"

(Bruce 1997, ch5)

2

Why are schemas important?



Children learn through repeatable behaviours.

Schemas are important to allow the brain to develop and grow. Children have natural urges to learn – schemas help with this.

"Whenever she finds something a bit of a challenge, she repeats her actions many times ..." (Cath Arnold, 2014)

Recognising schemas Have you ever...

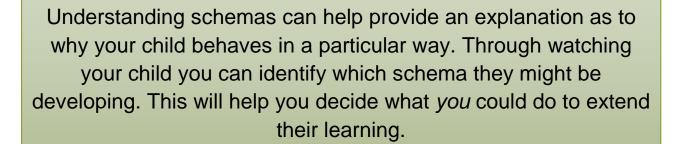


- ...given a child a present and noticed they are more interested in the box rather than the toy?
- ...noticed a child paint or draw a lovely picture then cover it completely in scribble or paint?
- ...noticed a child repeatedly climbing on top of furniture or dropping or throwing objects?

Schemas can provide the answers!

4

Why should you know about them?



Let's take a look at some of the most common schemas...

...covering themselves or other items this may be a schema

Do they hide under blankets or inside boxes, wrap things up, paint over pictures, fill up bags with bits and pieces, fill buckets with sand, put objects inside things, dress up in hats, shoes and belts?

They are exploring the idea of completely covering objects, spaces and themselves.

This is called **ENVELOPING!**

You can support this urge by...

- Giving your child access to objects like baskets, tubs, containers, pots and jugs
- A dress up box with hats and scarfs, shoes and belts
- Providing wrapping paper and objects



If a child is repeatedly interested in...

...things that turn, including themselves, this may be a schema

Do they have an interest in wheels or cogs, circular movements, spinning and drawing circles?

They are exploring the idea of how they and objects turn.

This is called **ROTATION!**

You can support this urge by...

Giving your child access to objects that spin or rotate such as cars with wheels, lock with key and spinning tops

Watching washing machine and trolley wheels

Providing paint brushes and other art materials to make circular patterns



...how things join together/come apart this may be a schema.

Do they tie knots, take things apart, join tracks, fasten ropes to furniture, glue or nail materials together?

They are learning out about how things join together using different materials.

This is called CONNECTING/DISCONECTING!

You can support this urge by...

- Giving your child access to objects such as train tracks, blocks and pegs
- Making necklaces with tubes and string
- Providing paper, string, card and sticky tape to stick things together
- Playing games such as holding hands and ring a roses



If a child is repeatedly interested in...

...moving objects from one area to another this may be a schema

Are they carrying items to a special person, loading a buggy or trolley with lots of items, want to be transported in a buggy or bike themselves?

Through exploration children will be learning about distance, journeys and places, as well as mapping where things are.

This is called TRANSPORTING!

- Giving your child access to small trollies, baskets, bags, pockets and buckets
- Moving self, items or others in wheel barrows or charts
- ➤ Moving sand, water or playdoh from area to area



...how objects and people move and how they can affect that movement this may be a schema

Do they drop objects, jump, climb up and down, open and close cupboards?

They are learning about height, speed, distance and how things move.

This is called **TRAJECTORY!**

You can support this urge by...

- Allowing your child to climb up and over, under and through objects safely
- Building things and knocking them down, throwing and kicking balls
- Allowing them to drop items of various size and weight from various heights





If a child is repeatedly interested in...

...placing objects in a particular position: on top, below, in front, behind or around the edge of a shape this may be a schema

Do they line objects up, place objects by size from smallest to largest, produce paintings with ordered lines or dots? Collages or constructions may display a sequence of objects.

They are learning about size, scale, shape and pattern.

This is called **POSITIONING!**

- Allowing your child to line up toys
- Blocks and other construction materials which can be used to position
- Providing natural materials such as shells, pebbles and sticks







...creating spaces for themselves or objects this may be a schema

Do they enjoy playing with Lego, train track and blocks, make pens for animals or cars, surround themselves with cushions, draw or paint a line or frame around a picture?

They are learning about space, measurement and distance

This is called **ENCLOSING!**

You can support this urge by...

- Providing a large cardboard boxes for children to climb in and out of
- Making dens with materials and furniture
- Filling and empting containers in sink or bath





If a child is repeatedly interested in...

...seeing things from different perspectives this may be a schema

Do they like to look at things in different ways by turning the objects or themselves?

They may enjoy hanging upside down, elevating themselves or objects.

They need lots of opportunities to climb, roll, tumble and spin.

They are learning about movement, co-ordination and problem solving.

This is called **ORIENTATION!**

- Taking your child to play parks with climbing frames and hills
- Climbing trees, hanging upside down
- Exploring different ways that your body can move tumble, roll, spin and twist



...gathering or spreading objects this may be a schema

They may enjoy placing objects in a pile and spreading or scattering them.

Allowing space and objects to scatter is important.

They are learning about balance height weight width.

This is called **Heaping/Scattering!**

You can support this urge by...

- > Taking children to throw seeds to ducks.
- > Allowing children a sweeping brush and pan, shredded paper
- > Baking experiences, scattering flour etc
- > Splashing in puddles



If a child is repeatedly interested in...

...how materials change their state this may be a schema

They may be fascinated by how materials change and enjoy mixing substances together to see change in shape, colour and consistency.

They are learning the cause and effect.

This is called **Transformation!**

- Making play dough, baking activities and melting ice
- Dressing up and wearing masks
- > Supporting children to make powder paint, gloop/gluck, jelly
- > Allowing children to have mud kitchen play, adding, pouring, mixing etc





If you would like to find out more about schemas you could ask your child's key worker or look up some further reading:

- Schemas: Learning through play (2020)
 https://education.gov.scot/parentzone/learning-at-home/schemas/
- Understanding Schemas in young children. Again Again! (2013)
 Sally Featherstone
- Observing young children (2014) Tina Bruce
- Extending thought in young children (1990) Chris Athey
 A huge thank you to the families of Midlothian for letting us use their photographs.