

# Motion Trail

## Module 3





## Motion Trail

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### Learning proposals

Paint like Miro  
Line stories  
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Making marks





## Motion Trail

Motion Trail enables children to practice the basic motor skills that are used to write and shape letters. They will look at the movements they need to learn, together with speed, pressure and accuracy.

### Learning to write letters

The motion trail is designed so that selected movements can be experienced in a way to engage with all of the senses. Agile and coordinated finger and hand movements are pre-requisites for successful economical writing movements and ensuring that letters can be written quickly and following the right shape. These activities encourage the development of movement and the use of different writing materials and techniques.

### Writing and developing a rhythm

When we write, we move: we speed up, slow down, and sometimes stop completely. We use a certain amount of pressure when we write, as well as an appropriate writing rhythm.

With more practice, accuracy also improves. This coordination leads to automated movement sequences which take place thanks to memorised patterns and without conscious control of eyes and hand.

The better the basic motor (kinematic) skills for writing (speeding up - speed - pressure - repetitive accuracy), the more flowing and economic the handwriting becomes. This complex development of coordinating writing movements is acquired at different times by children. Before this can be mastered, basic coordination is necessary – particularly between the hand and fingers.





## Motion Trail



### Making marks

#### Activity outline:

In this activity children experience how, with different movements, materials, and writing and painting instruments, they can create graphic pictures of lines and marks.

#### Warm up:

Share with the children some artwork by the artists Miro or similar which have distinctive/ abstract shapes and tracks within them. Discuss the artwork and encourage the children to point out the different shapes they can see.

#### Main task:

Stick large pieces of paper up onto a wall or lay them on the floor (the plain side of wallpaper is good to use).

Provide the children with pencils, crayons, pens, paints, paintbrushes and chalks and encourage them to make their own shapes and marks on the paper using the materials of their choice. Encourage the children to try out thick marks and fine lines, rings and dots, spikes and waves, splodges, dabs and streaks in all colours and intensities.

Every movement should initially be made using "gross" motor skills. The children can try things out in a completely "wild and free" way. Over the course of the experience, they can start using smaller sheets of paper and work in smaller formats. Print-outs, for example, pictures by Miro, are a real inspiration and encourage the children to paint, draw and make marks with all kinds of writing instruments.

#### Materials required:

- A wide variety of coloured pencils, crayons, pens, paints, paintbrushes and chalks in different thicknesses (and rollers)

- Large format, stiff paper

- Paintings for inspiration as available i.e. Miro (images available online)

#### For the extension:

- Wax crayons
- Smaller pieces of paper
- Paper clips



#### Follow up:

Talk about the shapes and marks which the children have created. Which shapes did they like making most? Which parts of their body did they use to make the shapes?

#### Extension:

Pieces of paper can be shaded with wax crayons to create two or three different layers of colour. To do this, the lightest colour is applied first, and increasingly darker colours are drawn over it, with black used last. The children can then impress different shapes onto each piece of paper using the end of a paintbrush.

#### Observation points:

- Do the children have sufficient hand and finger dexterity to make the different shapes and patterns?
- Do any children struggle with certain movements?
- Are any children too shy to take part and cautious about making their mark?





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## Motion Trail

### Hand and finger coordination

#### Activity outline:

Children experience ways of moving their hand and wrist, without moving their forearm or the rest of their body to make marks.

#### Warm up:

Show the children how to make an arc shape on a piece of paper by laying the lower arm on the table and keeping it still while only moving the hand holding a pen or pencil from left to right (just like the movement of a windscreen wiper). The pen leaves traces of colour in the shape of a rainbow. After around five movements for one arc in the rainbow, the pen is changed for the next colour. This also relaxes the muscles. Then the hand is laid on the sheet of paper in such a way that the next small arc of colour is drawn underneath the first.

#### Main task:

Encourage each child to create their own rainbows using lots of different coloured pens and pencils. When regularly changing between pens, it is okay to draw over the edges of the other arcs. The children shouldn't be worried about not making the form of the arc with absolute precision. Encourage the movements to be made using different levels of pressure, one arc should be firm, the following light, and the following even lighter.

#### Follow up:

Who drew a rainbow with all its colours? Talk about the movement marks that are lighter or darker. How do they need to use their pen to make these different gradations of colour?

The aim is not to paint shapes precisely. Instead it is to discover how different shapes are created with a flourish and by taking pleasure in experimentation. The children should be encouraged to try out whatever shapes they like. If the movements from the wrist become larger, the shapes become longer; if the movements of the fingers become larger, the shapes become squatter. These pictures can be displayed beautifully on the alphabet tree (see *Module 1: World of Writing*). This is a way of recognising the children's achievements and motivating them.

#### Extension:

Encourage the children to make shapes including triangles, ovals, circles and squares using similar movements to the ones they have been practising.



#### Materials required:

- Paper
- Wax crayons
- Fibre-tip pens
- Coloured pencils



#### Observation points:

- Can the children carry out these wrist-finger movement tasks in such a way that the forearm moves as little as possible?
- Do the children recognise the visible connection between pressure and the colour changes?
- Are the children confident enough to consciously change their pressure and speed?
- Do the children enjoy painting and writing using rapid movements, or is a "well-formed" shape more important to them?



## Motion Trail

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### Line stories

#### Activity outline:

Children enjoy tasks that are related to stories. Simple line drawings are easy to do and it is enjoyable to make these into spoken drawings. Its graphic implementation succeeds and it is also suitable for training increasingly rapid movements. In this activity lines can tell stories. This "line story" is told and drawn together.

#### Warm up:

Demonstrate to the children a drawn story using simple line drawings. For example: **"This is Peter."** A simple matchstick man is sketched and talked about at the same time. A vertical line for the body, diagonal lines for the arms and legs and a circle for the head. **"He's walking slowly"** long lines are drawn **"with his dog"** matchstick dog, drawn with a horizontal line and two short lines as legs, a triangular head and a small triangle for an ear **"back home"** rectangle with a triangle for a roof, thin rectangle as a chimney, windows and two doors, and smoke from the chimney. Now work with the children to draw the story again, this time with them drawing at the same time as you recite the story.

#### Main task:

Encourage the children to create their own drawn stories adding their own details to the initial matchstick man such as movements of different speeds, eyes, ears, a nose and the outline of a mouth. The story can now be carried on **"This is Peter. He's going home quickly with his dog. His mother's waiting."** The movement mark changes, which means the lines have to be made more quickly. The way he walks changes, the long lines become lots of shorter lines. The dog and the house stay the same, and so their shape is already stored in the children's memories, meaning that they can be drawn more rapidly. Now the matchstick man's mother also has to be drawn. In the story, there might also be a playground, a bus, a slide, and so on. Allow the children to add what they feel they would like to see. Continue the story for as long as suits the group. Ask the children to take over as narrators to add bits to the story. Encourage everyone to keep drawing images along with the narration.

#### Follow up:

This activity will help children who draw slowly and with lots of attention to detail to move faster while also encouraging children who draw quickly and lose accuracy to take a calmer approach. Talk to the children about how they shouldn't panic about the flow of their writing movements but they should find a good pace which allows them to keep up with the work they are given and allows them to write clearly. It is a question of gradually finding the a balance between shape and speed for each child. Also talk about how practising their letters will help them write full words and sentences, just as they have started with a basic picture story and then made it more detailed.

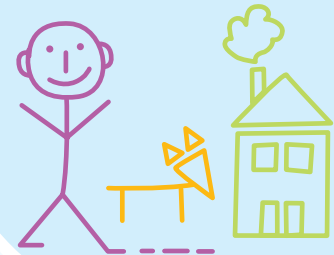
#### Extension:

Set the same task to be completed at home and to share with parents and carers what they have been doing. Can their parents and carers draw a line story too?



#### Materials required:

- Paper
- One pencil per child



#### Observation points:

- Can children draw the line pictures quickly and do they enjoy marking these on paper?
- Do they make up similar stories based on the initial story, and can they make up simple drawings for these too?
- Can they make increasingly faster movements without compromising form?
- Do they enjoy telling each other line stories?



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## Motion Trail



### Different speeds

#### Activity outline:

This project teaches children how to turn gross-motor movements into fine-motor movements and focuses on developing flowing writing. The aim here is to create racetracks using rapid and flowing movements and shapes that are also used when shaping letters. The movements need to be sufficiently controlled.

#### Warm up:

Share pictures of racetracks, rollercoasters, train tracks and roads which show the different shapes they follow including; straights, corners, curves, loops and bumps. Discuss how

#### Main task:

Ask the children to design imaginary racecourses on paper using the shapes and tracks they have been looking at as inspiration. With long and short straights and different types of bends, loop-the-loops and jumps can also be included. There should be a starting and finishing area as with all types of tracks. Then, using the basic elements for writing (see poster) show the lines and the curves in their design that are required for writing. Next, ask the children to lay out their racetracks on the floor and, using the basic elements, join them all together to make one monster track!



#### Materials required:

- Paper
- Templates for basic elements – see template on the poster
- Scissors, glue
- Torch
- Fibre-tip pens and water-soluble coloured pencils or wax crayons

#### Follow up:

Once the racecourses have been created they can be driven on the paper using a finger or a bottle cap; then the children's initial experiences are discussed. A fun alternative is to drive along the course with a pocket torch a little distance away from the paper – from a birds-eye perspective. Who has already memorised the course and can draw it on paper with all the details? When they follow the course, which parts go fast and which are slower? The course should be navigated with the writing and non-writing hand.

This exercise focuses on developing flowing writing by laying the groundwork for the future. There is always a compromise between accuracy and writing speed when learning to write. The more precisely a letter is to be formed, the slower it is written or painted. Remembering how the tracks were made on different parts of the course encourages the development of motor skills for writing. When writing from memory, mistakes can be positive as they allow corrections to be made to the necessary movement or writing traces. Mistakes offer an opportunity to learn, they do not mean the child is off-track.

#### Extension:

There is great opportunity to add lots of individual design features to the tracks: stick on pictures of racing cars, motorbikes, horses, runners, signs, symbols of rockets before the straights (which show that moving faster is good), or pictures of snails before a tight bend. Encourage the children to add to their racecourses and get used to the shapes they have used to create them.

#### Observation points:

- Do children work out which speed is best for them to trace the tracks?
- Do they understand instructions like "try going faster" and "slow down", and can they and do they want to also apply this to the lines they are tracing?
- Do some children simply start tracing away wildly, without making any attempt to control their movement or writing track?



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## Motion Trail



### Getting the pressure right

#### Activity outline:

This activity encourages the children to work with varying pressure when writing to help them recognise the difference it makes to their writing style and comfort. Greater pressure is also often used when the task becomes more difficult. The easier the task, the more relaxed the children are.

#### Warm up:

“Ghost marks” on white paper are marks that you can’t see at all from far away, and even when you are close up it is difficult. Give the children a sheet of white A4 paper and then put a second sheet underneath it. Using a pencil, ask the children to press down on the paper to write their name. It needs to be hard enough to mark the paper underneath. This is a lot harder than it may seem. You can’t make the marks quickly, and instead it is necessary to make the shapes, and letters particularly slowly. Now ask the children to lift the top piece of paper off. Can you see letters on the bottom sheet of paper? Can you still see the marks when the sheet is held further away?

Use a dark coloured crayon to shade carefully and lightly over the sheet of paper. Where the paper has been pressed down, an impression on the page remains when it is shaded over. The darker the colour of the pencil, the clearer the trace of writing. These are ghost letters. See if everyone has managed to make some ghost letters.

#### Main task:

Ask the children to write out some “secret letters” using the skills they have just been practising. Encourage them to write out a message, a word or someone’s name on a piece of paper using the same techniques they have been using and then pass to a friend who can colour over the note to reveal its secret!

#### Materials required:

- Paper
- Pencils and colouring pencils



#### Follow up:

Talk to the children about their writing style and what pressure they usually write with. Talk about how they can change pens or pencils often to ensure that their hand and finger muscles have time to relax, avoiding cramp. Talk about how writing should “feel easy, as though the pen is floating over the paper” and when drawing and writing, the children’s grip on the writing instrument should be light enough for someone to be able to take the pen out of their hand easily. This represents the optimal pressure when writing. The thinner the pen, the tighter it is held. Thick writing instruments reduce the tightness of the grip. The children should think about what thickness helps them hold the writing instrument loosely and talk to others about what helps them.

#### Extension:

Ask the children to try drawing different lines on the paper using a thick, coloured pencil (waves, spirals, garlands, arcades, straight lines). They can change the pressure from very hard to light. How does this affect the lines when they shade over them?

#### Observation points:

- Do the children hold the pen appropriately?
- Is the change in the pressure that they use visible when asked to write “hard, harder or light”? Can they immediately change their writing marks?
- Is the right balance of pressure found when shading in using wrist movements?
- Is it easier marking with upper or lowercase letters?