Music for the Brain

Resources from The Children's Trust

200 activities

using sound and music
for children and young people with
acquired brain injury and neurodisability
for parents, teachers and carers to use

The Children's Trust
For children with brain injury

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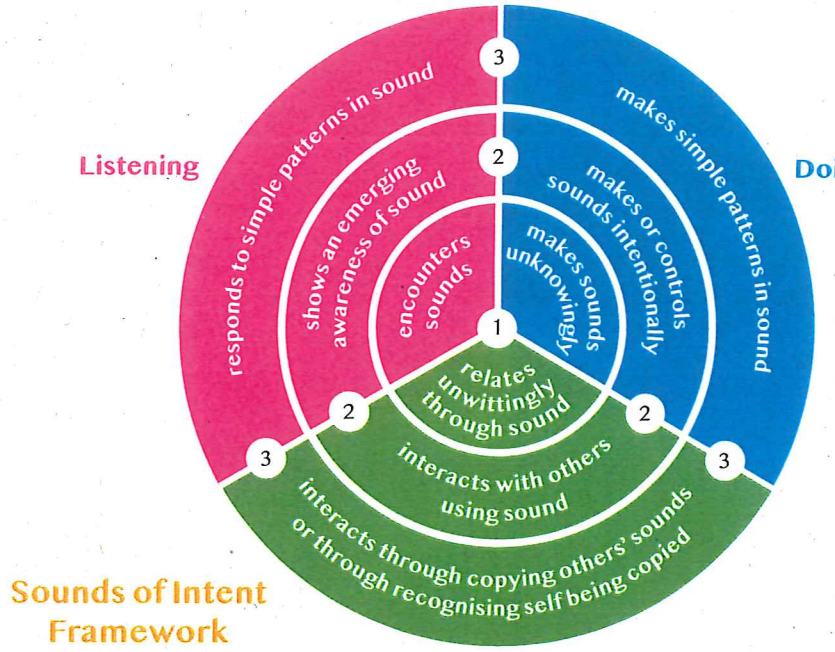


Sounds of Intent Framework Levels 1-3

www.soundsofintent.org

Welcome to **Music for the Brain**, an innovative set of resources developed for The Children's Trust by Sounds of Intent Charity in partnership with the Applied Music Research Centre at the University of Roehampton.

The resources comprise 36 cards, each with six suggestions for activities using music and sound that are appropriate for the developmental level of the child or young person concerned.

The activities relate to Levels 1–3 of the Sounds of Intent framework of musical development:

Level 1 When a child or young person makes no discernible response to sound and any sound-making that does occur appears to be accidental

Level 2 When a child or young person responds consistently to sound and shows an evident sense of agency in making sounds

Level 3 When a child or young person recognises simple patterns in sound, comprising repetition or regular change (shown, for example, through anticipation), and can produce such patterns with clear intentionality, potentially copying what someone else does, and enjoying being copied

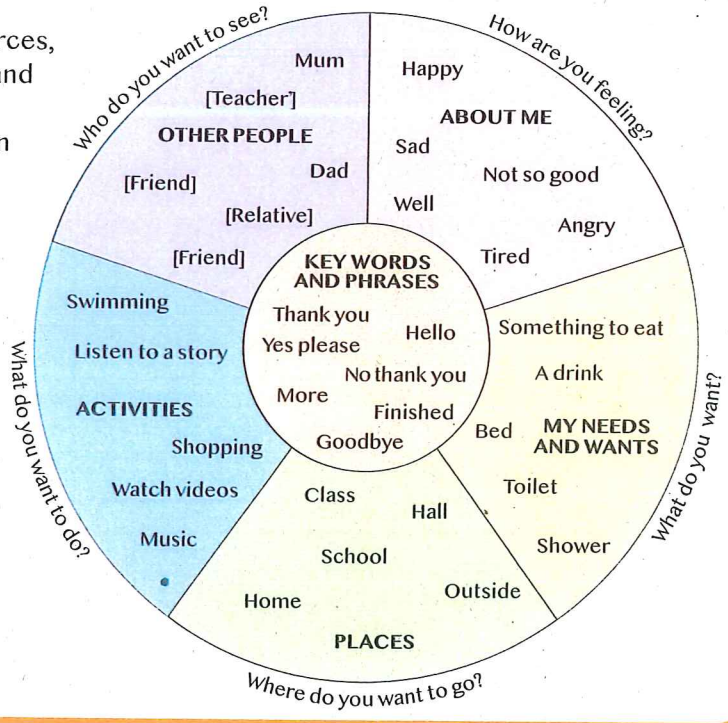
The cards correspond to the three ways in which children and young people can engage with sound and music, through **listening**, **doing** and **interacting**. There are four cards pertaining to each of these three domains of engagement at each of the first three Sounds of Intent levels, making 36 in total.

Use the resources first to assess a child or young person's level of auditory and musical development. Observe whether they respond to any types of sound or music, and, if so, in what contexts. Beyond this, do they seem to recognise simple patterns, by anticipating the continuation of a regular beat, for example? Do they deliberately make sounds themselves, perhaps seeking a response from you, and do they react to the sounds that you make? Beyond this, will they imitate what you do, and do they enjoy being imitated?

Once you have established a child or young person's level of functioning, choose a card at that level, or just beyond it, in order to nurture progress. Be imaginative but systematic in what you try. Keep a note of what works, and when, so others can use this information too. Maintain a video record to share with parents and other carers as appropriate.

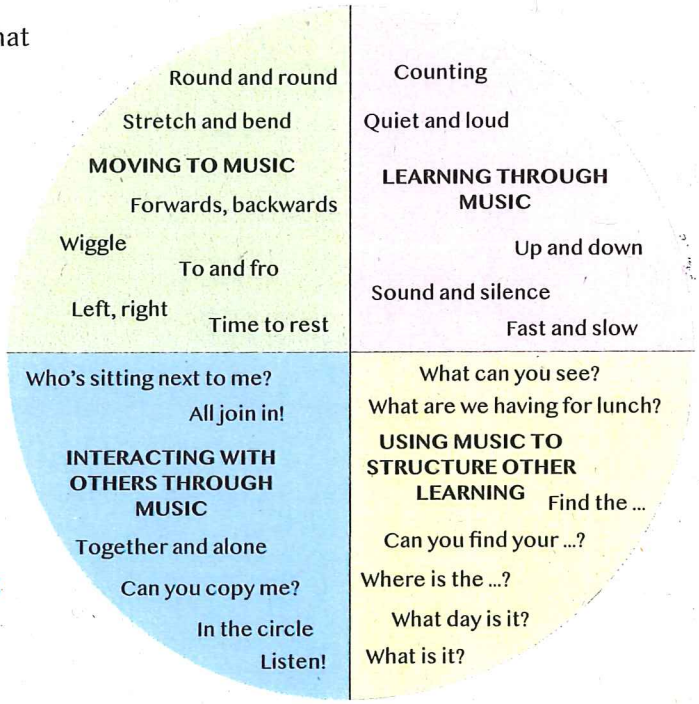
The **Tuning In** resources, consisting of songs and musical activities designed for children and young people with complex needs, will be of value in working with some of those with brain injuries.

There are 27 songs that promote the understanding and use of everyday language:



There are 25 songs that promote wider learning and action:

The **Tuning In** resources are published by Jessica Kingsley and available for purchase, and are freely available to download from The Amber Trust www.ambertrust.org



Level 1

Listening

1

Try making all sort of different sounds to see whether I respond

Be imaginative but systematic, and keep a note of what happens for future reference

Music for the Brain

- Think of all the sounds you can make with your voice: humming, whispering, clicking, whistling
- Remember to get close up to me, so the sounds are clear and focussed
- Make sure that the environment is as quiet as possible, to help me concentrate on your sounds
- Bring me into contact with everyday soundmakers: rustly paper, a tin containing a few dried peas, a jangly bunch of keys, a small string bag with pebbles in
- Use instruments in the same way, so that I am in contact with the drum as you tap it, or the tambourine as you scratch it, or the rainstick as you turn it over
- Make sounds in front of me or behind, from the left or right, stationary or moving

Level 1

Listening

2

Play me different kinds of music and see whether I react to any of them

Think particularly about the basic qualities of the music – what instruments are playing and whether it is fast or slow, for example

Music for the Brain

- Play music in short bursts, with sound following silence, to give me time to process what I've heard
- When you play me recorded music, remember to put the speakers close to me or even touching me, so they vibrate against my skin
- Let me experience different melody instruments, one at a time – do I respond to any of them?
- Try low notes and high notes, long notes and short notes, loud notes and quiet ones – my brain may find it easier to start processing some rather than others
- Don't forget to sing to me, not just in music sessions, but through the day, to enrich your engagement with me
- Always allow **plenty of time** for me to respond – wait without saying anything to let the sounds sink in

Level 1

Listening

3

Let me encounter sounds and music in different environments

Remember that sounds strike us very differently depending what type of space we are in

Music for the Brain

- Let me experience the muted effect on sounds made in a small, quiet room with soft furnishings
- Now take me to a hall that echoes and play me music in there, near to me and further away
- Try the brighter acoustic of a long corridor in school or elsewhere
- Can you play me music in the hydrotherapy pool?
- Take me outside, somewhere quiet, and play me sounds to see if I react
- You could use an amplifier to make or sounds picked up by a microphone louder; if you have the equipment, try adding reverberation of different kinds

Level 1

Listening

4

Let me experience sound and other sensory input at the same time

All soundmakers have other sensory qualities too

Music for the Brain

- Let me experience the weight of a tambourine on my lap as you drum your fingers on it
- Let me feel the warm wood of a recorder on my palm as you blow it
- Show me the light dancing off a cymbal as it vibrates in the sun
- Let me sense the smell of a new Kenyan drum held close to me as you play a beat on it
- Let me experience the buzzing vibrations of a didgeridoo that is laid across my stomach or touching my feet
- Let me feel the cool metal of a brass instrument like a trumpet or a trombone on my hand as someone plays it

Level 1

Doing

5

Enable me to experience how the movements I may make involuntarily can make or control sounds

Think of the different ways in which even small movements can cause or affect sound

Music for the Brain

- The rise and fall of my chest could operate beam technology
- If I move my tongue or mouth from time to time, this could be used to control sounds through gesture recognition app on a tablet
- Even the blink of my eyes could be used to switch a sound on (or off)
- Amplify any sounds I may make unknowingly through natural processes such as breathing …
- … or my heart beat
- Make a careful note of any signs of awareness that I may show to the sounds you help me make

Level 1

Doing

6

Guide me to make movements co-actively that produce sounds

Sensitively guide my hands or feet, or arms or legs to make sounds

Music for the Brain

- Help me to tap a small drum with my hands, or a larger one with my feet
- Help me to scratch a tambourine or a cymbal with my nails
- Help me to strum the strings of an autoharp, a ukulele or an electric guitar, or use an app on a tablet
- Help me to shake small bells on my attached to my wrists or ankles
- Help me to tip instruments like a rainmaker or ocean drum one way and then the other
- If the sounds we make are very quiet, you could enhance them using a microphone and an amplifier – remember to place the speaker near me

Level 1

Doing

7

Think of the different environments in which you can help me make or control sounds

Remember that the sounds I make may seem different according to where they are made

Music for the Brain

- If it's possible for me to lie back in the hydrotherapy pool with my ears in the water, then any vocal sounds I make will sound louder than usual
- A really quiet environment (such as the multisensory room, with nothing turned on) may help me concentrate on any sounds I make
- Use technology that can mimic different environments by adding reverberation to my sounds
- Think of large places that echo (halls, long corridors or places of worship, for example)
- See if I'm more inclined to make sounds outside near buildings that bounce my sounds back to me
- If you can get me there, you could even try the great outside (in a field or on top of a hill, for example)

Level 1

Doing

8

Guide me to explore soundmakers with my other senses too

Help me to integrate information from all my senses

Music for the Brain

- As you help me tap a drum with one hand, can I feel its vibrations on the other?
- Try shining a light on a cymbal that makes changing visual patterns as you help me scratch it
- Use equipment that enables me to combine changes of sound and light in the sensory room using switches or movement-sensitive beams
- Convert any vocal sounds I make into vibration using a microphone, amplifier and 'stick on speaker' attached to my wheelchair or table
- Put me in a swing that brushes by hanging soundmakers like chains of tiny bells and shells
- Associate certain soundmakers with certain scents in multisensory sessions

Level 1

Interacting

9

Help me make sounds in response to yours and respond to any sounds that I may make without knowing it

Scaffold interactive sound-making with me

Music for the Brain

- First, make a sound yourself …
- … and then help me to make a sound in return, using an everyday soundmaker, or instrument or specialist technology
- Use a microphone and amplifier to intensify the vocal sounds we both make
- Put a large ocean drum across our laps and make sounds with it in response to any sounds I make without realising what I am doing
- Now try the same activity using movement-sensitive software on two tablets
- Remember to allow plenty of time between sounds to give me a better chance of processing what is going on

Level 1

Interacting

10

With a colleague, model interactions in sound for me

Show me how interaction in sound can work

Music for the Brain

- With a colleague, sit either side of me and take it in turns to make sounds with your voices ...
- ... or with everyday soundmakers
- You could make sounds that are similar ...
- ... or deliberately make them contrasting
- Interact using the range of digital sounds available on technology such as tablets
- Try having one adult work with me and another work alongside one of my friends in exchanging sounds

Level 1

Interacting

11

Try trading sounds with me in different environments and different contexts

I may be more likely to start showing awareness of interactions in sound in particular environments or in different contexts

Music for the Brain

- Almost all everyday spaces are noisy – so try working in a small room that is as quiet as possible …
- … though sometimes a large echoey space may be just what is needed to spur my brain into action
- Try working in a hall, with **groups** of people modelling interaction in sound for me (as in 'call and response' songs)
- Try in a corridor, with people moving towards and away from me as they model interactions in sound
- Am I likely to be more alert at certain times of the day …
- … or following a feed or medication?

Level 1

Interacting

12

Model interactions in sound that are also multisensory in nature

I may need more than just sounds to begin to understand how interactions work

Music for the Brain

- When modelling interactions in sound, enhance their potential impact by touching either hand or arm in turn
- With two people, use the to and fro movement of a swing to set the pattern for modelling interactions in sound
- With a large rainstick across my lap, two people can pick up either end alternately as they make vocal sounds
- Try enhancing the impact of the sounds alternating either side of me with a little fan blowing gently on my face or arms in turn
- In a multisensory room, sounds coming from different sources can be associated with different lights
- Am I likely to be more alive to interaction in stimulating environments such as the hydrotherapy pool?

Make many different sounds, to see which catch my attention

Make sounds with your voice or your hands or objects in the environment

Music for the Brain

- Sing long notes to me with clear vowel sounds and short ones with consonants
- Clap your hands, rub them together, drum your fingers at different speeds on different everyday objects and handheld percussion instruments
- Shake rattly containers, jangle small chains and crinkle rustly paper
- Make sounds that are high or low, loud or quiet, short or long, smooth or rasping
- Make sounds that change by going up and down or getting louder and quieter ...
- ... or just stay the same for a long time – and then leave a period of silence

Level 2 **Listening** 14

Put together playlists for me of different kinds of music

Search the internet for different styles and genres

Music for the Brain

- At first choose music that is simple in structure, with plenty of repetition – pop songs are often like this
- Play short bursts of the music at first – perhaps just the hook of a song – and watch carefully for any reaction
- How do I respond to hip hop and electronic dance music such as techno, dubstep and house?
- Try popular music from other-than-Western cultures: Bollywood music, J-pop, K-pop, Inuit pop music, etc
- Try film and TV music, the jingles that define radio stations and are used on adverts, gaming music, etc
- Try experimental music from the 1950s and 1960s, including pieces by Karlheinz Stockhausen and John Cage, and minimalist music by Steve Reich, Terry Riley and Philip Glass

Take me out and about to hear sound and music in the wider world

Think of all the different environments in which sound and music are prominent

Music for the Brain

- Shopping malls and shops all use alluring music!
- Fields, forests and farms are all full of natural sounds: the wind in the trees, the scrunch of leaves, birds singing, animals grunting, baa-ing and moo-ing
- Visit churches, temples, mosques, synagogues and other places of worships: many religions have strong traditions of singing, chanting and using music to enhance a sense of spirituality
- Take me to the seaside – especially near a shingly beach when the wind is blowing the waves onto the shore
- Record the sounds of different environments, and replay them back at school or home
- Think of combining these sounds with the smells, sight and the feel of objects too

Level 2

Listening

16

Let me experience how sounds can be linked to other sensory input in a variety of different ways

Remember, everything that makes a sound has multisensory qualities

Music for the Brain

- Show me a gong that shimmers in the light when you hit it with a soft beater
- Help me get to grips with musical gourds from Asia that I can feel being twisted back and forth
- Let me feel a guitar or ukulele resonating on my arm
- Put a loudspeaker on a resonance board and play music through it so that I can feel the vibrations all through my body
- Drop pebbles gently into a bowl of water that splashes on my hands
- Let me experience a pile of autumn leaves with their peaty smell being scrunched together

Doing

Encourage me to make different types of sounds myself

Help me to make sounds in different ways

Music for the Brain

- Use a microphone and amplifier to enhance the effect of the vocal sounds I may make
- Gently guide my hands to explore everyday soundmakers: things to rustle, scrunch, squeeze and scratch
- Sensitively guide my hands to explore instruments and make whatever sounds I can with them
- Help me make sounds by using a stick or a beater, which could be attached to my wrist if I find it hard to grip things with my fingers
- Remember that using my feet might be the easiest way for me to make sounds – particularly loud ones!
- Use technologies like switches and gesture detectors that can convert **any** movement into **any** sound

Level 2

Doing

18

Help me to express my feelings through sound

Empathise with the different feelings I may express through sound

Music for the Brain

- Make an exaggerated response to any vocalisations I make that may indicate how I'm feeling
- Respond empathetically to the sounds that I make with objects and instruments, which may indicate excitement, frustration, anger or joy
- Try to identify triggers that make me vocalise or make sounds with objects in certain ways
- Can you change the way I feel by using a word of reassurance, a touch on the hand or a hug ...
- ... and so change the nature of sounds that I make?
- Remember that choosing **not** to make a sound may show how I'm feeling too

Give me the chance to make sounds in different places

Think beyond the classroom and the living room at home

- The buzz of activity at a shopping centre may stimulate me to be more vocal ...
- ... or a large railway station ...
- ... or even an airport
- Sitting on a train may stimulate me to vocalise
- Take me outside in different weathers – things sound different on a hot, still day, or when it is misty, or even snowy
- In contrast, sometimes take me into very small rooms that absorb sound and observe the effect it has on my soundmaking

Level 2

Doing

20

Guide me in soundmaking that is multisensory in nature

Take advantage of the fact that most soundmakers are multisensory in nature

Music for the Brain

- Encourage me to feel of guitar strings as I brush them with my hands
- Guide me to feel the smooth, cool metal of the cow-bell I am holding as a hit it with the other hand
- Remind me of the rough, hard skin of the musical gourd that I am shaking
- Help me appreciate the changing weight of a rainstick as I tip it up with one hand and down with the other
- Assist me in feeling the texture of seashells a the box a I stir them round to make a noise
- Give me time to enjoy the scrunchiness of a bag of dry leaves that I make rustling sounds with

Level 2

Interacting

21

Assist me in making sounds myself in response to the sounds that you make

Help me to respond to you by using sounds

Music for the Brain

- Use your voice to make sounds I enjoy, and let me watch, close up, to what you are doing
- Try using soundmakers or hand-held percussion instruments that we can share, and then use one each for you and me
- Make a burst of sound and then have a period of silence; wait for me to respond – I may need lots of time!
- Put clusters of bells on my wrists or ankles and on yours too, and play shaking games with me
- Place a balloon in between us and share the sounds made with fingers and voices
- Make funny noises down a cardboard tube held to my ear, and then swap

Level 2

Interacting

22

Respond empathetically to any sounds that I make

Interpret my soundmaking as attempts to reach out to you

Music for the Brain

- Remember, when I make a sound it is always for a reason
- So respond to my sounds in whatever ways intuitively seem to be appropriate …
- … emulating what I do, or 'challenging' me through making a contrasting sound
- Let us share an instrument like a drum or tambourine and show me how to take turns in playing it
- Next, try the same activity using two **separate** instruments of the same type
- Now use two instruments of **different** types

Level 2

Interacting

23

Have 'conversations' with me in sound in different contexts

Remember that I may react differently in different situations

Music for the Brain

- People's voices sound quite different in echoey places like the hydrotherapy pool
- There may be outdoor instruments in the adventure playground that we can play
- Playing with everyday soundmakers can be just as much fun as instruments, like taking it in turns to hit a log with a stick
- Remember that I may become more or less vocal and receptive when I am travelling in a vehicle
- Different people's voices may catch my attention and make me want to respond in different ways
- The time of day may be important – am I a lark or an owl?

Level 2

Interacting

24

Interact with me through sound in ways that use my other senses too

Remember that human interaction is usually multisensory

Music for the Brain

- Get up close to me and exaggerate your facial expressions when having conversations in sound
- Reinforce the communicative impact of the sounds that you make by touching my hands or arms
- Engage with me through reciprocal sound-making when I'm on the swing
- Using a resonance board, let me feel the sounds through my body that we both make using instruments
- Using a microphone and amplifier, put a loudspeaker on the resonance board to convert the sounds that we make with our voices into vibration
- Use technology to add a visual dimension to our conversations – sound sensitive lights or changing images on a screen

Use your voice to make simple patterns in sound to catch my attention

Get close to me, and let me feel your lips or throat as your make sounds

Music for the Brain

- Start by making patterns that use the lips, like 'ma, ma, ma, ma, ma' ...
- ... or 'puh, puh, puh, puh, puh'
- Try patterns that use the tongue, like 'dah, dah, dah, dah, dah'
- Try patterns of sibilant sounds: 'sss, sss, sss, sss, sss'
- Try other patterns in which the mouth stays still, like 'mmm, mmm, mmm, mmm, mmm'
- Make whistling patterns: 'peep, peep, peep, peep, peep'

Level 3

Listening

26

Make short bursts of a regular beat on percussion instruments for me to hear

Try different instruments – the important thing for me to realise is that the same pattern can be made using different sounds

Music for the Brain

- Tap the same simple pattern on different instruments such as the drum and tambourine
- First use your fingers, and then try different beaters, soft and hard
- Scratch your nails to and fro, making the same pattern on the head of a drum
- Make the same pattern by tapping instruments gently on my hands or arm
- Tap the pattern on a resonance board, so that I can feel the regularity of sound and vibration right through my body
- Use switches or motion-sensitive technology to make the same, simple pattern, and let me watch and feel what you are doing

Let me listen to patterns of sound that go higher and lower, or louder and quieter

Make the same pattern using different instruments than can play a tune

Music for the Brain

- Make short patterns of three notes next to each other that go up and down on keyboard for me to listen to
- Do the same thing using a glockenspiel or xylophone
- Now do a similar up and down pattern using gesture-recognition technology on a tablet or using a beam
- If you can, do the same on the recorder or penny whistle
- If you can, make the same short patterns that go up and down on one of the strings of a ukulele or a guitar
- Now try a different kind of pattern on different instruments that can get louder and quieter: start playing a single note or chord quietly, then get louder, then gradually quieter again

Level 3

Listening

28

Help me to be aware of what is going to happen by using sound symbols

Be consistent in using sounds that you want to have a special meaning

Music for the Brain

- Place different sets of windchimes in the doorways of important rooms in school, and let me brush pass them when going in
- Give the staff who I see a lot different jangly bracelets to wear to strengthen their identity in my mind
- Give me and my important friends 'personal soundmakers', and use them at times of greeting
- Help me to anticipate what is going to happen by using sounding objects of reference, such as a jingly bell for music, a clanky chain for the swing
- It's really important that all those working with me use the **same** sound symbols **consistently**
- Record a 'sound diary' of what happens during music and other sessions, so that I can re-live the experiences

Level 3

Doing

29

Support me in making a regular beat on soundmakers or by using my voice

Make sure that I have different opportunities to make a regular beat

Music for the Brain

- Put my hand over yours while you tap a beat on a drum with your fingers …
- … then let me have a go on my own
- Help me to hold a stick to make a beat on instruments and other soundmakers
- Show me how to make other repeating patterns too, using scraper and shakers, or using my voice
- Always remember that a beat comes from my **head**, not my **hand** …
- … so it's best to guide me with you hand under mine, so that I am always in control

Level 3

Doing

30

React positively when I deliberately repeat sounds using my voice or soundmakers on my own initiative

Remember that my attempts to repeat things may happen anywhere and at any time

Music for the Brain

- Let me have plenty of time and space to experiment with pattern-making on my own
- Give me soundmakers that I find the easiest to play, since I will be more likely to try to repeat things using them
- If I pause, give me plenty of encouragement to get going again
- Try using beams or gesture-based switches too – set them so they can only make two or three different sounds to make it easier for me to repeat one of them
- Move other parts of my body – or all of me – in time with the patterns that I make
- Make recordings of what I do for me to listen to later

Level 3

Doing

31

Help me to make short patterns of notes that get higher or lower

Use a real keyboard or a virtual one using touchscreen technology

Music for the Brain

- If possible, using a keyboard, show me how to play single notes with one finger or my thumb, using my stronger hand if I have one
- Now show me how to play a simple beat on one key; you could make it easier for me to find with a coloured and/or textured sticker
- Encourage me to use the white notes and then the black notes, if possible
- As always, give me **plenty of time** to try things out for myself
- Next, show me how to play short, simple up or down patterns on three notes next to each other on the keyboard (moving to the right is 'up', and left is 'down')
- Help me to make **longer** patterns that go up and down

Level 3

Doing

32

Put together families of soundmakers for me to explore

Help me to make sense of things by grouping my soundmakers into different kinds

Music for the Brain

- Make a collection of metal utensils, like spoons, forks and a whisk
- Give me a set of wooden items like spoons, claves and castanets to explore
- Put together a collection of things to shake like a rattle, maracas and a small rainstick
- Make me a set of scrapers like a guiro, a wooden frog, and even a washboard if you can find one!
- Collect things that make a sound by plucking, like a ukulele, banjo, autoharp and guitar
- Constantly reinforce the fact that the **same** simple patterns in sound can be made on **different** instruments and soundmakers

Level 3

Interacting

33

Copy the sounds that I make with my voice, and encourage me to copy what you do

By copying, I can come to understand that I'm like you and you're like me

Music for the Brain

- Copy any sounds that I make with my voice
- Give me time to process what I've just heard
- Make a sound with your voice that is similar to one that you have heard me make
- Give me plenty of time to respond
- You may hear me copy you more and more accurately over time
- Repeat the activity many times in different contexts: with different people and in different locations

Level 3

Interacting

34

Echo the sounds that I make with everyday objects and instruments

Imitate me to show that I can influence what you do

Music for the Brain

- Imitate the sounds I make on instruments or other soundmakers
- Use the same instrument at first, to make it easier for me to tell what is happening
- Next, use a second instrument that is the same as mine
- Let me see or feel what is happening as well as listening
- Next use a **different** instrument to copy the **same** pattern
- Swap instruments!

Level 3

Interacting

35

Encourage me to imitate what you do on instruments and other soundmakers

Help me get a sense of what it's like to be you by encouraging me to copy you

Music for the Brain

- Put an instrument in my hands or on my lap and make a sound on it that I have made before
- Give me plenty of time to make my response
- Once I understand what to do, play another soundmaker the same as mine, so we don't have to share
- Then, see whether I will copy the **same** pattern made on a **different** kind of soundmaker
- Exchange instruments
- Repetition is key – playing copy games may become one of my best ways of relating to people

Level 3

Interacting

36

Play 'pass the sound' games with me

Give me a sense of being in a group
by copying sounds round a circle

Music for the Brain

- Let me sit in a circle of three or four people – first, one makes a sound with his voice, then the next person copies ...
- ... and so the sound goes round and round
- Now do the same activity with body sounds like clapping and stamping, and then use soundmakers ...
- ... that, to start with, are all the same ...
- ... and then different ones
- Add more people to the circle, one at a time