

Understanding the Neurobiology of Complex Trauma

Strategies for repairing trauma toolkit



Australian
Childhood
Foundation

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Creating safety – supporting the social engagement system

Creating safety – supporting the social engagement system

| | |
|--|---|
| <p>Environment</p>  | <p>A safe environment is paramount. Consider physical, emotional and cultural safety. Is the environment free from violence and abuse, responsive to physical and emotional needs and inclusive of cultural needs. Also ensure the environment considers the sensory needs of the child. Spaces that have too much stimulation - loud noises, bright lights, strong smells or too many pictures on the walls can be overwhelming for children experiencing trauma. Understanding the child's individual needs and providing enough sensory stimulation for growth but not too much so that the child is overwhelmed is the key. Remember safety is an individual experience. What seems safe for one person may not be for another.</p> |
| <p>Proximity</p>  | <p>Consider the child's need for closeness or space. Each child is different. Take into account the context, your relationship and the developmental age of the child. Being attuned to the child will help you to navigate what the child needs. If a child is dysregulated always remain within the line of sight of the child, unless your safety or the safety of others is at risk. Remember time in rather than time out. Any direct contact with the child should be initiated by the child.</p> |
| <p>Eye contact</p>  | <p>Eye contact is an important aspect of social engagement and enables feelings of connectedness and validation. Eye contact can be threatening though to a child who has experienced trauma as their social engagement system is usually on high alert. Consider ways to engage with the child using minimal eye contact. Chatting while driving along in the car, creating art or shooting hoops is a great way to engage the child in conversation and is less threatening than sitting face to face. Remember, each child is different so be guided by the child.</p> |
| <p>Facial expressions</p>  | <p>Children who have experienced trauma can often have trouble reading facial expressions and will often interpret expressions as anger or disappointment. Be aware of your facial expressions when engaging with the child. Aim for contingent facial expressions that look to mirror the child's inner experience – this conveys empathy and helps the child to understand themselves and feel heard. When the child is regulated, look for opportunities to assist the child to develop emotional literacy by using cards/games that match faces to feelings.</p> |
| <p>Tone of voice</p>  | <p>Prosody is the rhythm, pitch and tone of the voice, like when a mother alters her voice to soothe her baby. Tone of voice can have a powerful impact on a child's sense of safety. In situations where a child is dysregulated, consider the tone and pitch of your voice. A soft and gentle voice is more likely to deescalate an overwhelmed child.</p> |
| <p>Posture and gestures</p>  | <p>Consider your posture and gestures. How you approach the child will determine how safe or unsafe they may feel. If your posture is puffed up with your shoulders back, the child may read you as defensive and primed to fight. A posture that is strong, yet open and welcoming will help to calm the child. The child's implicit memory system may interpret certain postures or gestures as threatening, so stay attuned to the child and again be guided by them. Mirroring (whilst staying within your window of tolerance) is also important. Mirroring can convey empathy and a sense of feeling heard and this will help with coregulation.</p> |

Strategies for healing - creating safety



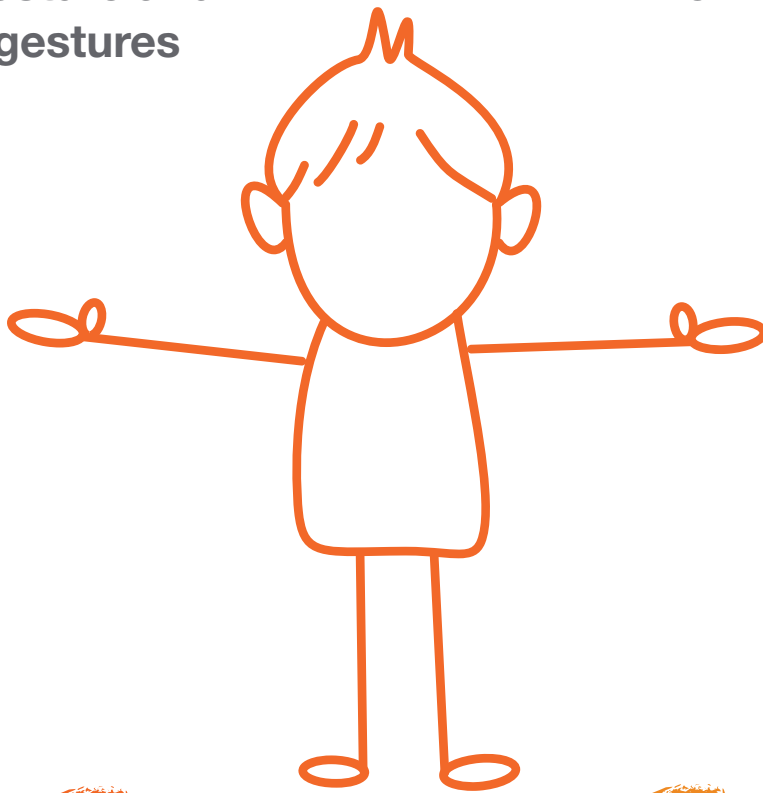
Posture and gestures



Environment



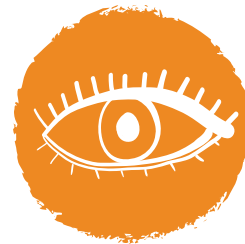
Tone of voice



Proximity



Facial expressions



Eye contact

Building the brainstem: Rhythmic and Repetitive

| | |
|--------------------------|---------------------------------------|
| Skipping | Cushions with textures |
| Bouncing a ball | Swinging |
| Running / walking | Stroking animals |
| Hand clapping games | Bread kneading |
| Rocking - chairs | Water play |
| Fit balls bouncing chair | Sewing |
| Squeezing stress balls | Songs |
| Circle breathing | Deep breathing |
| Colouring in | Drumming |
| Pen tapping | Marching |
| Music | Hammock swinging |
| Dance | Singing & percussion |
| Hydrotherapy | Feather breathing |
| Weighted blanket | Any textures - plants, fabric, paints |

Building the Cerebellum: Balance and Movement

| | |
|--------------------------|------------------------------|
| Dancing | Ropes course |
| Swinging | Climbing – over and under |
| Riding | Scooter/BMX/Skateboard |
| Bouncing on a trampoline | Clapping games |
| Any sport | Skipping rope |
| Chewing gum | Elastics |
| Yoga | Playing a musical instrument |
| Martial Arts | Art based activities |
| Swimming | Colouring in |
| Swinging in a hammock | |

Building the Limbic lobe: Senses and Emotions

| | |
|--|--|
| Listening to music | Stress ball |
| Playing percussion instruments | Sand ball |
| Dancing | Hacky sack |
| Grounding exercises | Hand cream massage |
| Mindfulness activities | Animals/Pets |
| Art therapy | Calm cards – visual cues that the child or young person selects |
| Massage | Calm box – collect objects that support the child or young person to feel calm |
| Establishing and looking after a veggie garden | Emotional symbols – could be words, colours, textures etc to link to emotional responses |
| Meditation | Emotional intensity symbols – could be balloons, colour charts etc to link to the intensity of the emotion |

Building the Cortex – Cognition

| | |
|---|---------------------------|
| 'Life story' work | Problem solving scenarios |
| Identity activities | Relationship mapping |
| Tell a story through a message on the back eg: making a pizza | Card games |
| Drumming with complex patterns to follow | Board games |
| Linking stories to experiences | Symbolic play |
| Identity web | |

Building the Prefrontal Cortex – Analytical and Abstract

| | |
|-----------------------------------|--|
| Mindfulness activities | Adventure activities |
| Talk based activities | Role playing games |
| Cooperation and competition games | Ghosting |
| Would you rather? | Choose your own adventure activities and stories |
| Story work | Drawing or writing eg: comics and/or songs |
| Yoga | |

Right - Left Hemisphere Development



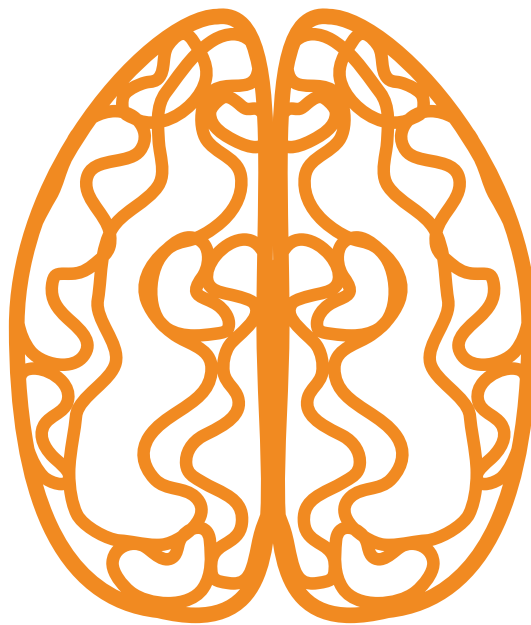
**Cup tapping /
stacking games**



**Tyre agility
course**



Hokey Pokey



**Mirroring
games**



**Physical activity
/ sports**

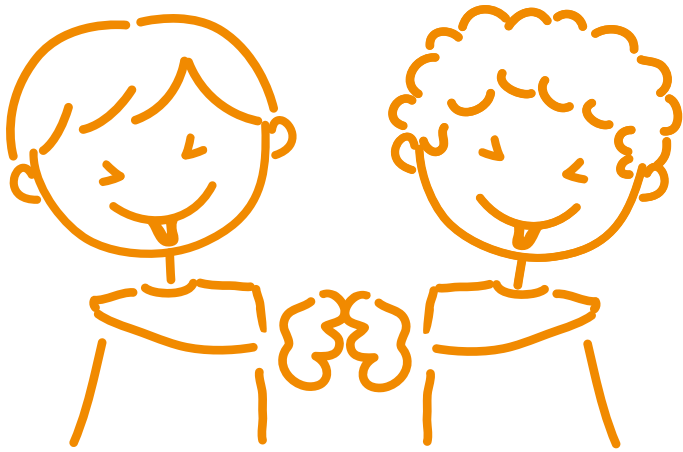


Clapping chants



Crawling games

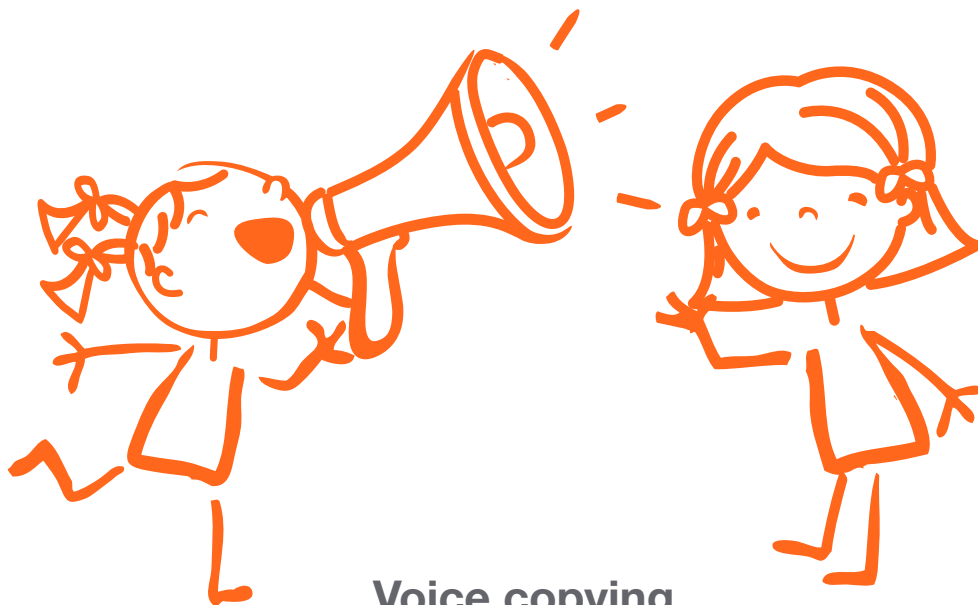
Attunement and Relationships



Mirroring games based on facial expressions



Mutual smiling

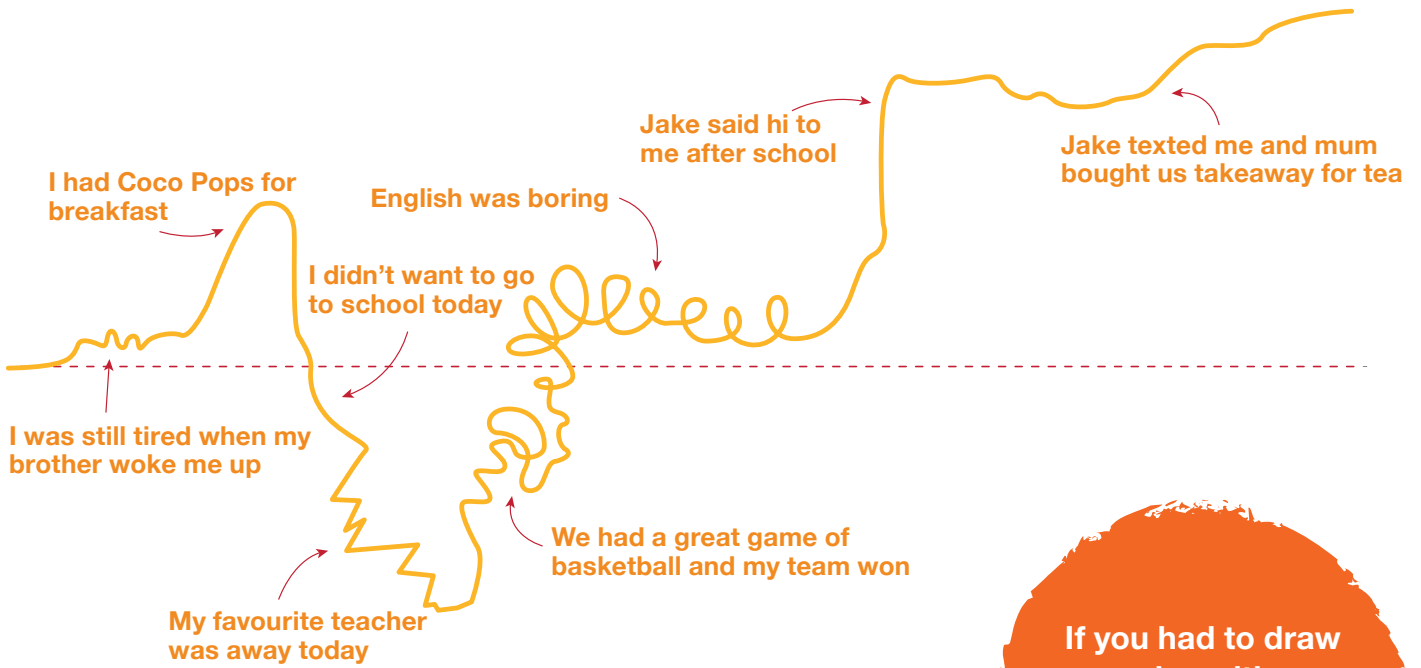


Voice copying

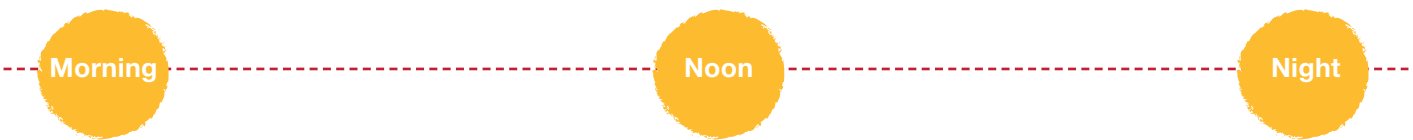
Creating predictability – visual timetable



Building memory - Reflecting on my day



If you had to draw your day with one continuous line, how would you draw it?



8 Senses



Visual
(sight)



Auditory
(sound)



Interoception
(awareness of basic functions – hunger, toileting, breathing)



Proprioceptive
(sensations from muscles and joints of body)



Olfactory
(smell)



Gustatory
(taste)

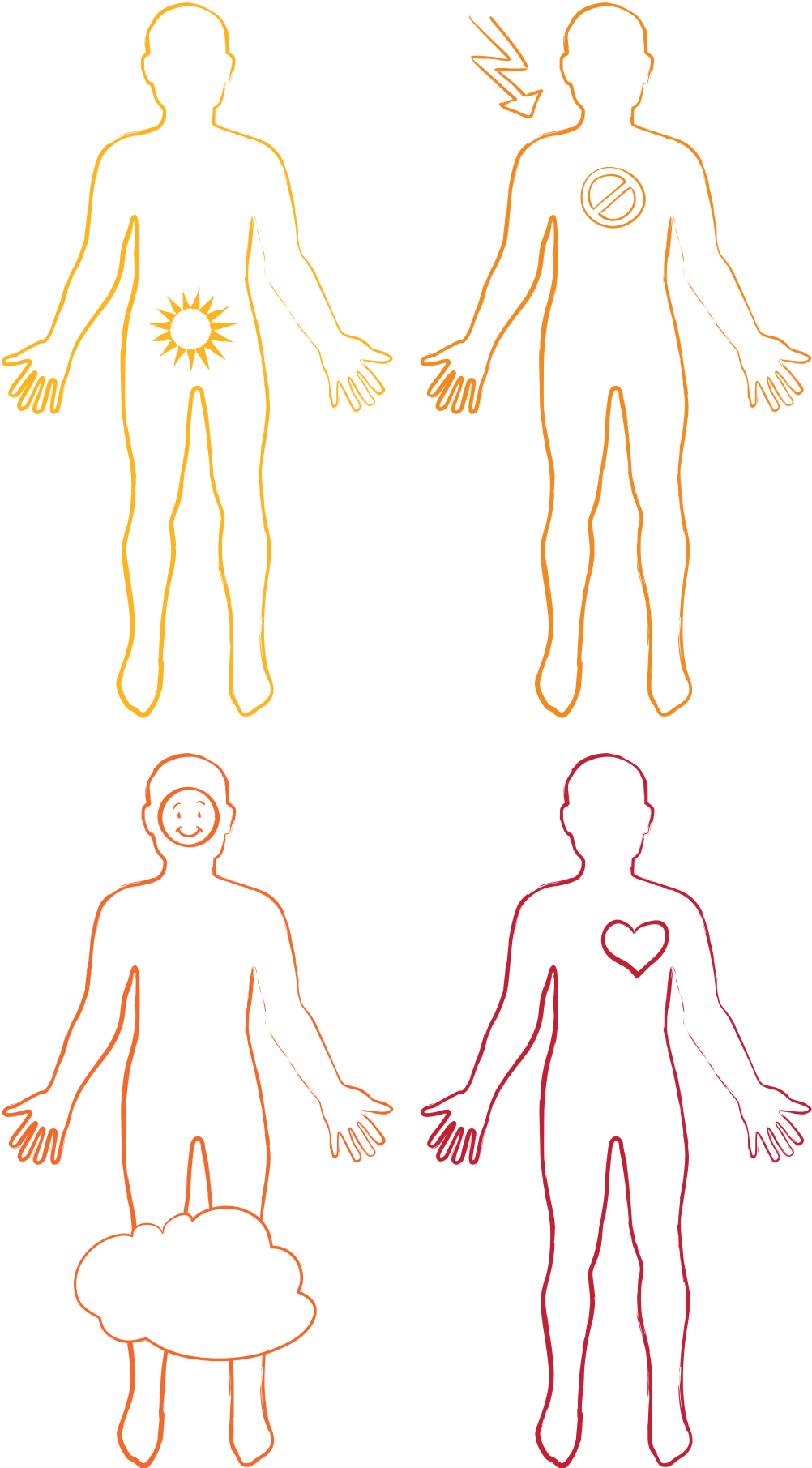


Vestibular
(sense of head movement in space)



Tactile System
(touch)

Body awareness - Body scan



Body awareness - Body scan

Aims:

Body mapping helps children practice tuning into their body, increases body awareness and befriends their inner body sensations.

Brain regions:

Cortex, Limbic lobe, Diencephalon, Cerebellum

Age range:

7 years to adult

Number of children involved:

- Individual or small group

When would you use this activity?

This can be used multiple times during your work with a child or young person. It could be used to show how the relationship with their body and self changes over time.

When wouldn't you use this activity?

This activity should be discontinued if the process results in a high level of distress for the child or young person.

Activity instructions:

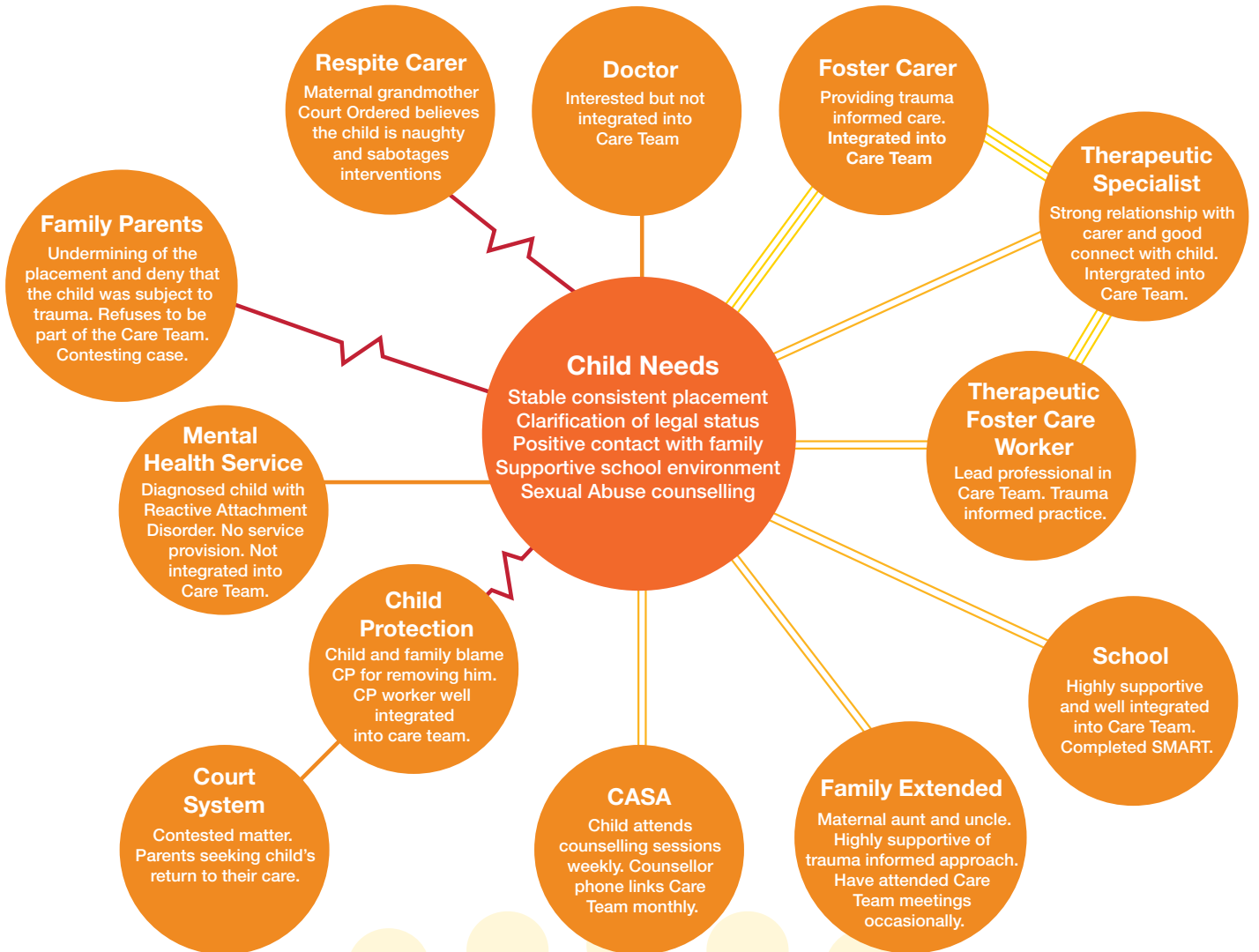
Invite the child or young person to tune into their body and how it is feeling and then to connect to each part.

- 'Tune into your body, check around inside your body and see what you can discover.'

- 'Begin in your head, and move your awareness gradually from your head down through your body (you might like to list different parts) until you get to your toes.'
- 'See if you can notice what's happening inside your body and look for different feelings. See if you can tell what colours or what sensations you can notice and describe.'
- 'Then, relax again and wait and see if another feeling or colour comes along. Sometimes there are lots of things and sometimes there is only one.'
- 'I wonder if you can notice any of these things when you are searching in your body:
 - Is there anywhere cool or cold?
 - Is there anywhere warm or hot?
 - Is there anywhere that hurts?
 - Is there anywhere that feels really good?
 - Is there anywhere that is tight or feels hard?
 - Is there anywhere that feels relaxed or feels soft and free?
 - What else can you notice in your body

Once they have completed this scan, then ask them to draw it or mark it on the body outline. They can use whatever signs they want to represent the feeling or what they have noticed about their bodies.

Relational Mapping



- ==== Strong Connection
- ==== Good Connection
- ==== Tenuous Uncertain Connection
- ~~~~ Stressful Connection

Holding the child at the centre

How does this information help me make sense of the child's experience?
What can I do to support healing?



**I need safe
and attuned
RELATIONSHIPS**



**I need to MAKE
MEANING of
my world**



**I need to
feel SAFE**



**I need connection
to my CULTURE**

Holding the young person at the centre

How does this information help me make sense of the child's experience?
What can I do to support healing?



**I need safe
and attuned
RELATIONSHIPS**



**I need to MAKE
MEANING of
my world**



**I need to
feel SAFE**



**I need connection
to my CULTURE**

References and Further Reading

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Working Together 2015: Adapted from Swan and Raphael 1995

The Brain on Fear: Scientists uncover the neurons in the mouse brain responsible for linking the sight of a looming object to scared behaviour. By Ruth Williams | June 25, 2015

Deep Systems: The Psychotherapist's Essential Guide to the Brain 2017

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Porges (2017) *The Pocket Guide to the Polyvagal Theory*, page 68, Norton

Intersubjectivity: Centre for Family Development: <https://www.center4familydevelop.com/Intersubjectivity.pdf>

The following provides some ideas for further reading regarding trauma and therapeutic responses to healing for children and young people.

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