

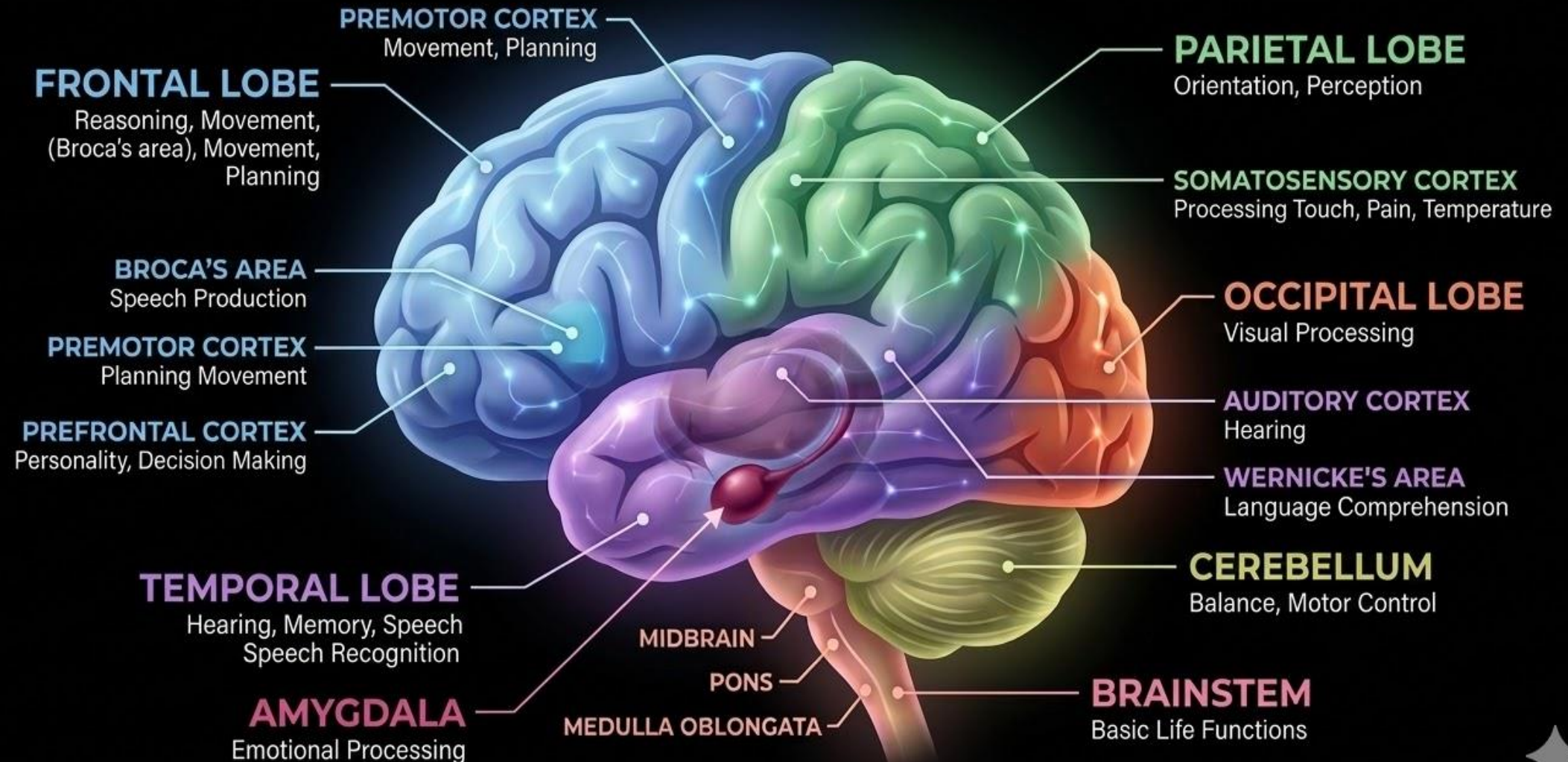


NEURONS, NATURE AND NARRATIVE

Presented by Casey Family Programs Child and Family Services

Learning Objectives

- Introduce attendees to the neurodevelopment of the brain
- Connect the benefits of Nature based interventions (stress reduction, self-regulation, connection, etc.) to neurobiology of the brain
- Tap into inner wisdom and reflect on our role as healers and what we already know about the benefits of nature, neuron, and narratives
- Through firsthand experience, learn how to guide the "Tree of Life" exercise.



Understanding Our Human Stress Response System



State-Dependent Functioning

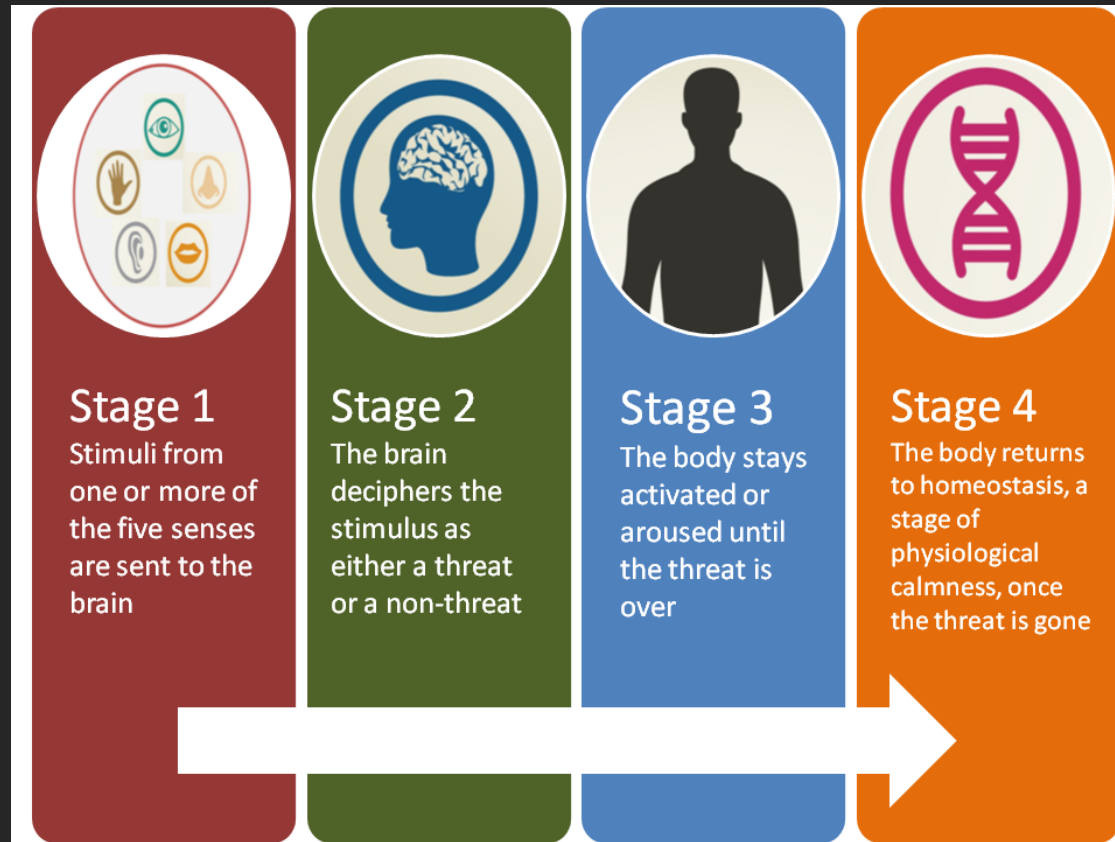
The persistent activation of the stress response system resulting in the emergence of traits is the underlying physiology of the issues related to our mental, physical & emotional health

Adaptive Response	REFLECT	FLOCK	FREEZE	FLIGHT	FIGHT
Predictable <u>De-escalating</u> Behavior <i>(behaviors of the teacher when the child or classroom is in various states of arousal)</i>	- Calm sounds - Personal space - Predictable touch - Predictable routine	- Quiet voices - Eye contact - Confidence - Rhythmic movement - Clear directions - Somatosensory activities	- Comforting and predictable voice; invited therapeutic touch - Singing, humming, music - Reflective listening - Reassurance	- Calm, quiet, presence - Disengage - Turn off lights, white noise - Reduce sensory input	- Calm affect - Disengage but don't disappear - Adult support - Individual attention
Predictable <u>Escalating</u> Behavior <i>(behaviors of the teacher when the child or classroom is in various states of arousal)</i>	- Loud Noises - Close uninvited proximity - Unpredictable touch - Changes in daily routine or schedule	- Frustration or anxiety - Communication from a distance (like yelling) - Complex directions - Ultimatums	- Raised voices - Raising hands/point finger, sudden movement - Threatening tone - Chaos in classroom, disorganization of materials	- Frustration of teacher - Yelling, chaos - Collective dysregulation of peers	- Physical restraint, grabbing, shaking - Screaming - Intimidating stance
"Mediating" Brain Region	NEOCORTEX Cortex	CORTEX Limbic	LIMBIC Midbrain	MIDBRAIN Brainstem	BRAINSTEM Autonomic
Cognition	ABSTRACT	CONCRETE	EMOTIONAL	REACTIVE	REFLEXIVE
CLASSROOM "STATE"	CALM	ALERT	ALARM	FEAR	TERROR
CLASSROOM CHARACTERISTICS	Reflection and consolidation of new information is actively taking place; or while testing, efficient retrieval of content is possible.	Active teaching can take place; students are internalizing new content and, 'mind wandering' to efficiently store new content.	Learning new content is difficult; students are either disengaging or acting out. Increases in individual self-regulatory behavior seen.	Learning is impossible. Engaging students difficult. Many demonstrate 'freeze' responses that appear oppositional/defiant. Increased acting out.	Aggression, reckless behavior, openly defying rules and authority. Full 'fight/flight' or "shut down."

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THE STRESS RESPONSE

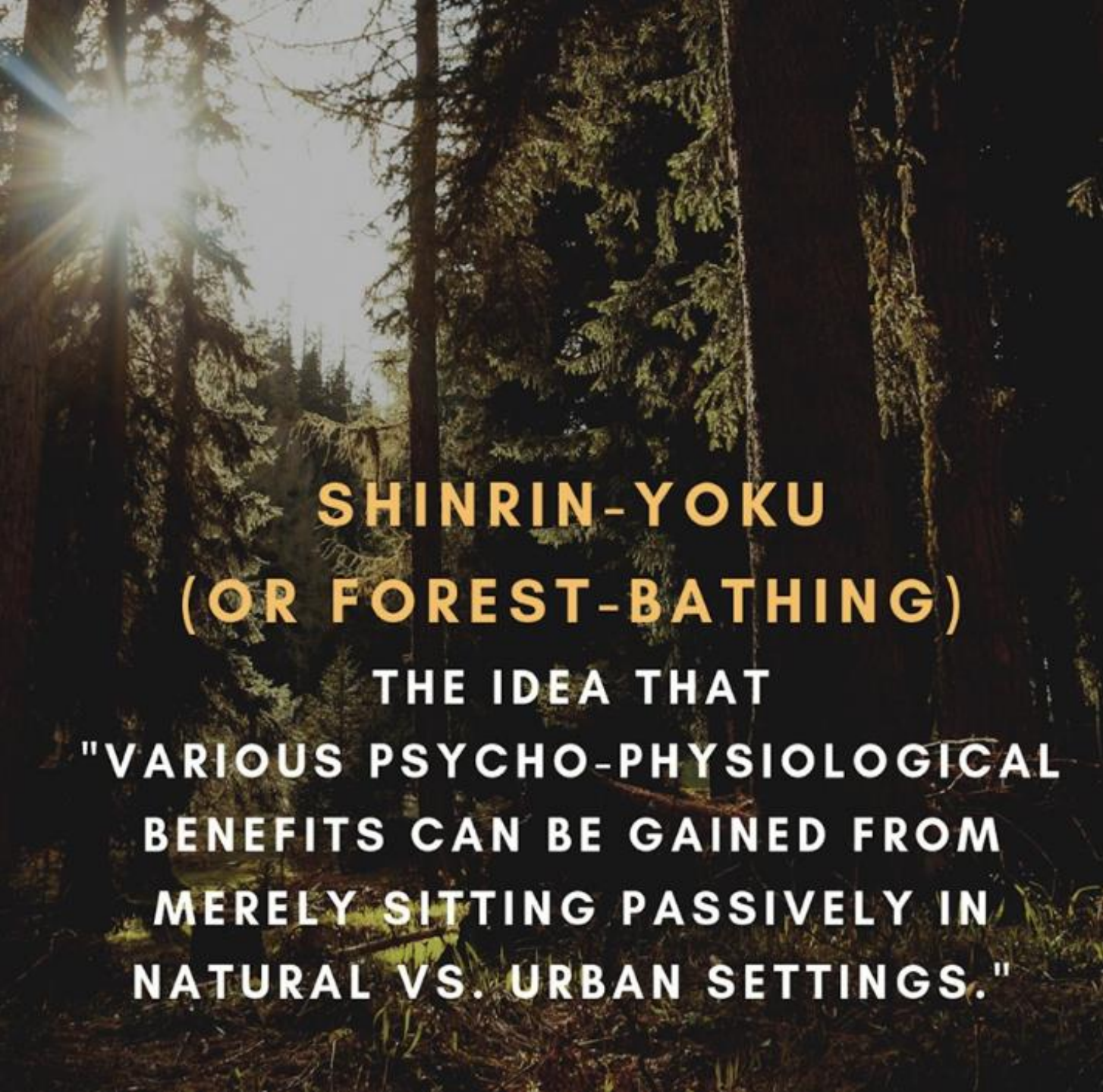
Negative impacts of our stress

- Increased Cortisol Levels
 - Increased Anxiety
 - Increased Tension
-
- Increased Fatigue
 - Increased Heart Rate
 - Increased Blood Pressure
 - Decreased Immune System



Being in Nature can offer

- Decrease in Cortisol Levels
 - A sense of Peace/Calmness
 - Return to Body Homeostasis
 - Improved Mood
 - Reduction in Stress
-
- Increased Energy
 - Decreased Heart Rate/Blood Pressure
 - Strengthened Immune System
 - Improved Sleep
 - Decreased Anxiety



SHINRIN-YOKU (OR FOREST-BATHING)

**THE IDEA THAT
"VARIOUS PSYCHO-PHYSIOLOGICAL
BENEFITS CAN BE GAINED FROM
MERELY SITTING PASSIVELY IN
NATURAL VS. URBAN SETTINGS."**

Self Care

How do we show up for
ourselves and our
children and families in a
trauma informed way?

Benefits of Nature-Based Interventions for Children Experiencing Adverse Childhood Experiences



Nature as Healer in Our Work

- Sensory Strolls –walks in neighborhoods, paths, trails, and around the farm
- Conservancy Trails Hikes/Runs
- Biking/Skateboarding
- Restorative Breaths in the sunshine
- Swimming
- Animal Therapy



- Backyard Yoga and sports
- Nature Bingo
- Bug Finding Adventures
- Gardening
- Outdoor Dancing/Drumming
- Quail watching
- Lots of family time in local lavender & mint fields, and in apple & cherry orchards



When you see something
beautiful and all you can
think about is instagram filters

you may need to increase
your dose of Nature.

PRESCRIPTION STRENGTH
NATURE
(terra mater) Rx

WARNING: Nothing in nature is clickable.

Nature Prescriptions

<https://parkrxamerica.org/>

Narrative Practice

- The Power of Stories and Neural Plasticity
- Exploring the Problem Story Line
 - Problem saturation
- Exploring the Secondary Story Line
 - Our role as Helper





Strong Story Development

- Remembering
- Reauthoring
- Agency



Click to edit text

Outsider Witness

- Who?
- Why?
- How?
 - Unique Outcomes
 - Resonance
 - Transport



The “Tree of Life”

This exercise is based on the idea of using the tree as a metaphor to tell stories about one’s life. You will be invited to think of a tree, its roots, trunk, branches, leaves, etc, and imagine that each part of the Tree represents something about your life

(Based on the work/article Ncube, 2006)



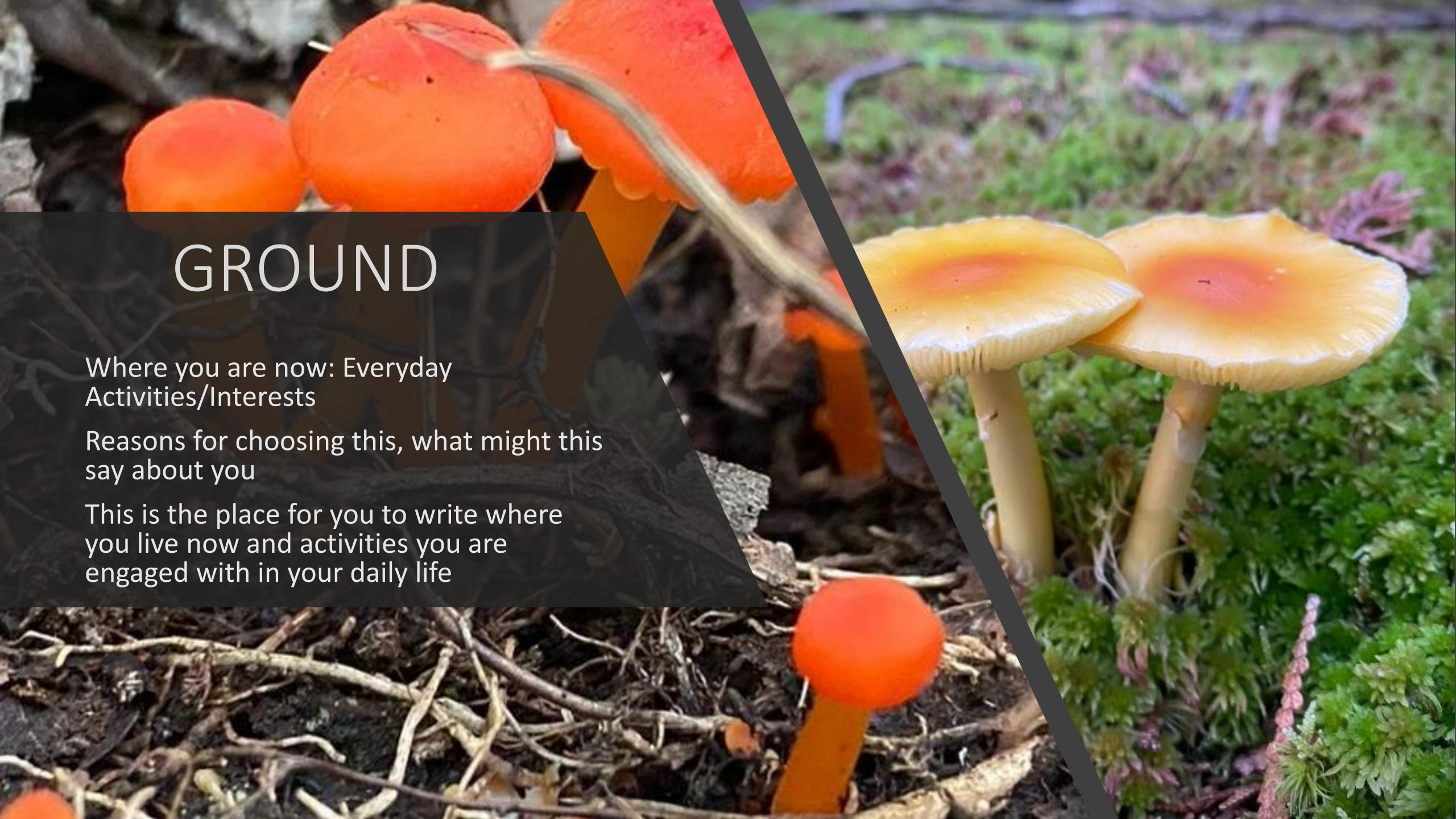
ROOTS

Where you're from: Places,
Ideas, Social Movements

Who were you before the
problem

Pleasant memories, what
should be remembered about
where you're from





GROUND

Where you are now: Everyday
Activities/Interests

Reasons for choosing this, what might this
say about you

This is the place for you to write where
you live now and activities you are
engaged with in your daily life



TRUNK

Draw the trunk of your tree. Write your skills and abilities and the things you are good at.

What is important/what has value to you: Skills, Abilities, Purpose, Commitments?

Who taught you, how does this show up in your everyday, who do you wish knew you this way, who knows you this way?





BRANCHES

Begin drawing the branches of your tree and write your hopes, dreams and wishes for the direction for your life.

Who/what inspires you? What does this say about you and what you stand for?





LEAVES

The *leaves* of the tree represent *significant people your life*, who may be alive or may have passed on, maybe from a book...

Important People who have contributed to your life

What have you held onto from these relationships? What did you leave them?



FRUITS

Add fruits to your tree. The fruits of the tree represent gifts you have been given, not necessarily material gifts; gifts of being cared for, of being loved, acts of kindness

Gifts you have received from others:
What have they taught you,
Who has contributed to your life



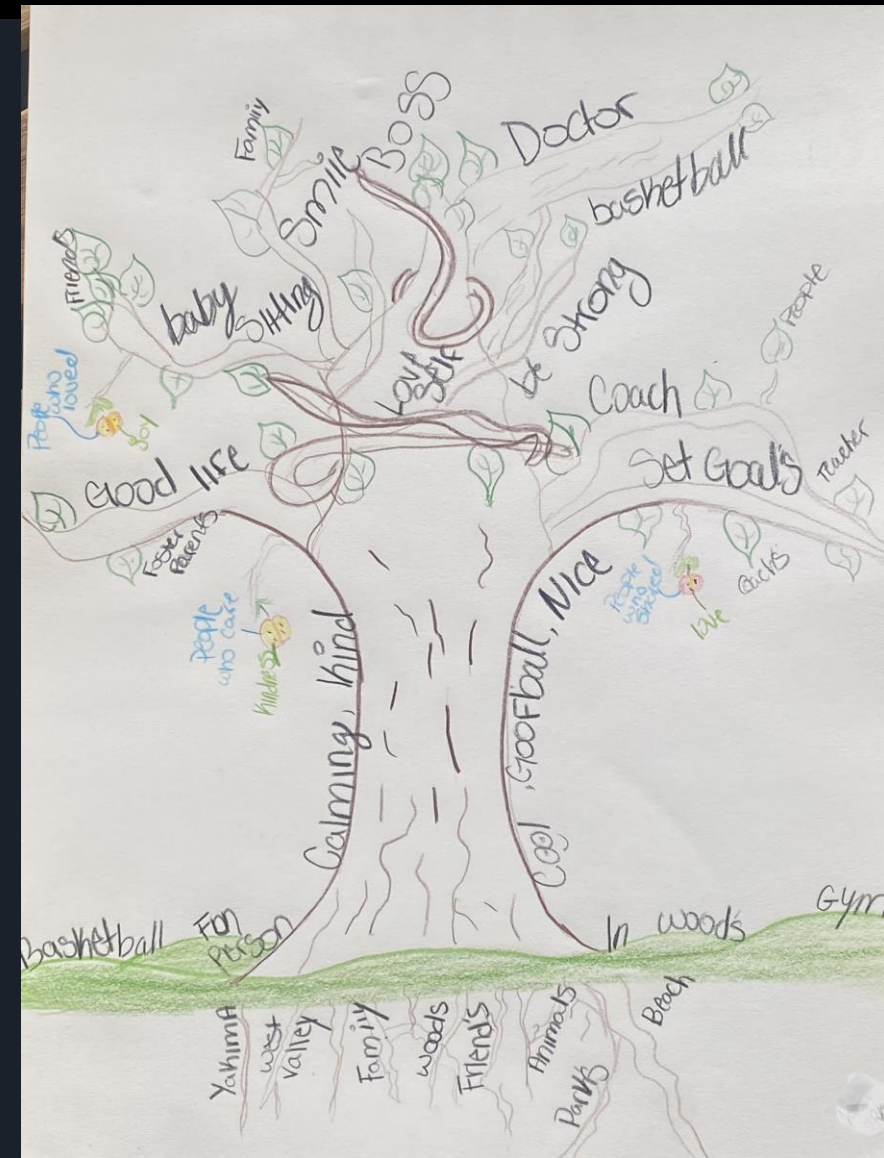
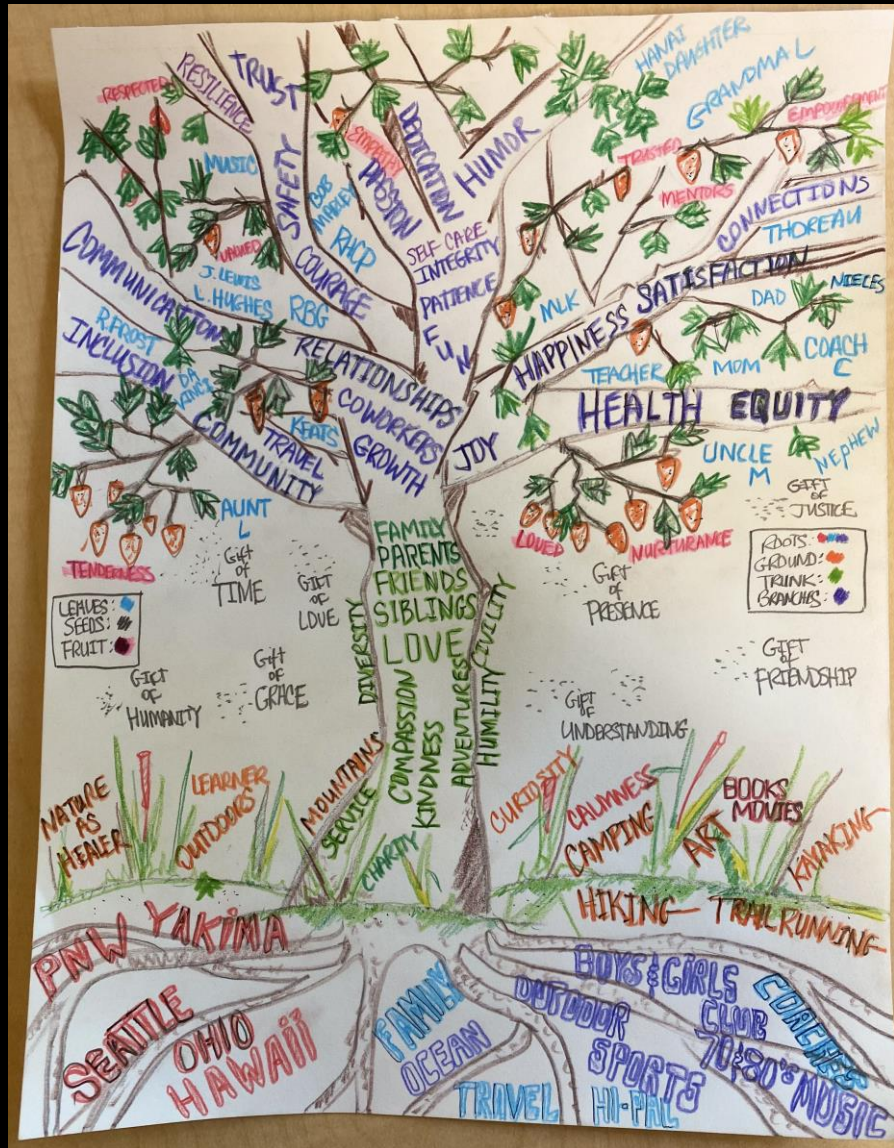
SEEDS

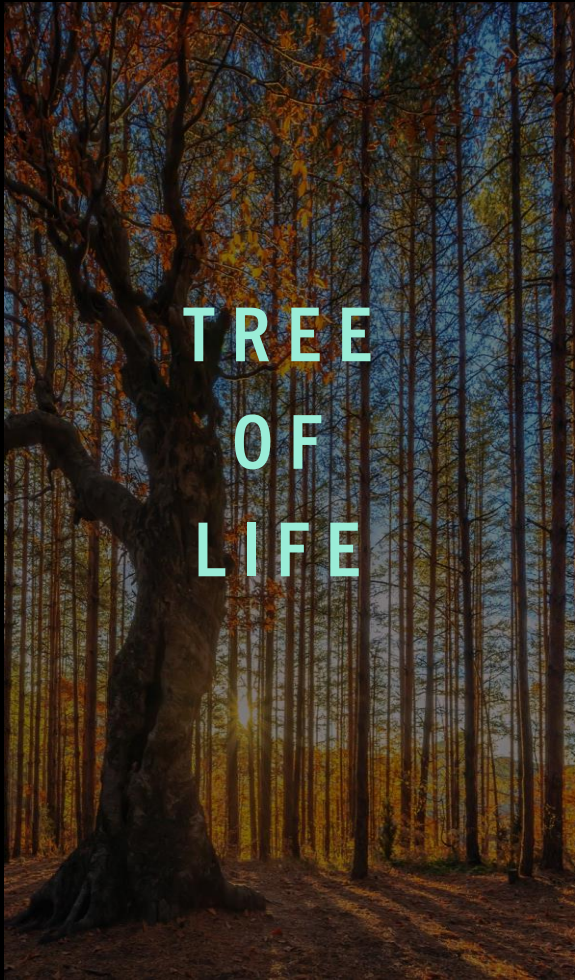


Complete your tree by adding the seeds, the gifts of the fruit

Gifts that you have given others or hope to give others.

TREES OF LIFE





- **ROOTS:** represent where you come from, family history, your origins, family name, ancestry etc
- **GROUND:** represents where you live, with whom you live with, what you like to do when you are at home, favorite place or hang out at home, favorite song or dance
- **TRUNK:** represents the things you are good at, talents, the things that people tell you are good at, special skills like caring for others, helping around at home, encouraging others etc.
- **LEAVES:** represent the most important people in your life. These could be people who have supported you, provided love and encouragement and have been supportive of you in different ways
- **BRANCHES:** represent your hopes, dreams, wishes and aspirations. This could be both about the near and distant future.
- **FRUITS:** represent the gifts that you have been given by others that have been helpful in your life. These do not need to be just tangible or physical gifts but they could include gifts of kindness, care, support, life skills taught or passed down to you etc.
- **SEEDS:** represent the gifts you have given to others.



FOREST

- Create a forest of beautiful trees: the “Forest of Life”!
- Choose one or more trees different from your own and write words of encouragement, support and appreciation
- Return to your own tree to read the responses to your story