

For early childhood education and care

# Early childhood learning trajectories

Resource collection

September 2024



## The Australian Education Research Organisation (AERO) is Australia's national education evidence body, working to achieve excellence and equity in educational outcomes for all children and young people.

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### Acknowledgement of Country

AERO acknowledges the Traditional Owners and Custodians of the lands, waterways, skies, islands and sea Country across Australia. We pay our deepest respects to First Nations cultures and Elders past and present. We endeavour to continually value and learn from First Nations knowledges and educational practices.

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# Introduction: How to use the learning trajectories

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# Introduction: How to use the learning trajectories

The Australian Education Research Organisation (AERO)'s Early Childhood Learning Trajectories are designed for teachers and educators working in early childhood education and care (ECEC) services for children in the years before school. They can support ongoing professional learning for individuals and entire ECEC services and teams.

The Early Childhood Learning Trajectories describe how children learn and develop in these key domains:

- [Executive functions](#)
- [Social and emotional learning](#)
- [Mathematical thinking](#)
- [Language and communication](#)
- [Physical development](#).

While each learning trajectory describes children's progress in a single domain, they are designed to be used in interconnected ways. A single experience within an early childhood program may support progress in multiple domains at the same time. Progress in one domain may depend on progress in another.

You can use the learning trajectories in a variety of ways to strengthen your curriculum and inform your pedagogical decision-making, in line with the [Early Years Learning Framework \(EYLF V2.0\)](#) or other approved learning frameworks used in your service. The learning trajectories also support the National Quality Standard (NQS), especially Standard 1.3: Assessment and planning. They can help your service lift quality and implement your Quality Improvement Plan.

This introduction will go through:

- [EYLF Principles](#)
- [EYLF Practices](#)
- [EYLF Planning Cycle](#)
- [EYLF Learning Outcomes](#).

## EYLF Principles

**The EYLF V2.0 sets out 8 Principles to guide ECEC practice, based on contemporary theories, perspectives and research evidence. The learning trajectories are designed to support these Principles, especially those listed in this section.**



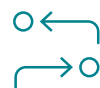
### Secure, respectful and reciprocal relationships

The learning trajectories are designed to be used flexibly, and seamlessly integrated into existing practice. They are a resource for building your professional knowledge – not a test or a form – and do not involve extra documentation. This means you can spend more time on what matters most: nurturing responsive relationships with children and families.



### Partnerships

The learning trajectories can support you to discuss children's learning, development and wellbeing with families, colleagues and educators and teachers. They are useful for facilitating partnerships between educators and teachers working with different age groups, as they show the continuity of learning, development and wellbeing throughout the years before school. They also provide useful language and ideas for describing each child's strengths at the transition to school, and enriching narratives about children's progress.



### Respect for diversity

The learning trajectories recognise that children learn and develop in unique ways. They encourage you to see each individual child's strengths and opportunities, recognising that children may be at different stages across domains. Children's progress may accelerate, slow down or even reverse at different times or in different contexts. The learning trajectories are open-ended, encouraging you to consider how children may demonstrate progress in each domain in ways that reflect their community, identity and culture.



### Critical reflection and ongoing professional learning

The learning trajectories can help you gradually build your understanding of how children learn and develop. They are designed to be explored, used, reflected upon and revisited over time. This includes supporting educational leaders to facilitate critical reflection with their teams.



### Collaborative leadership and teamwork

The learning trajectories provide you with the language to support professional conversations with your team about children's learning, development and wellbeing.

## What you can do next

The following are tips for using the learning trajectories to embed these Principles in your practice:

- Think about how you can use the learning trajectories in positive ways that enhance relationships with children and families. This includes recognising that children's progress is not always linear and avoiding misusing the learning trajectories as 'checklists' or milestones that need to be met.
- Use words and ideas from the learning trajectories in your interactions with families, colleagues and other professionals, to strengthen partnerships and build shared understandings of children's progress in each domain.
- As you explore the learning trajectories, reflect on what progress in each domain might look like for each child. Consider how you can use the learning trajectories to recognise and celebrate each child's strengths and progress in ways that are culturally safe and responsive.
- If you are an educational leader, consider how you can use the learning trajectories in individual and group professional learning. The ideas in this guide may help you design collaborative learning experiences for your team.
- Motivate each other to use the learning trajectories effectively in everyday practice. Draw on the learning trajectories to assist in sharing your insights about children's learning, development and wellbeing, and encourage others to talk about and share their perspectives.

### Reflection activity 1

Explore how your service's statement of philosophy and policies talk about learning, development and wellbeing, and how they are assessed, evaluated and supported.

How do the learning trajectories align with your service's statement of philosophy and service policies?



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## EYLF Practices

**The EYLF V2.0 sets out 7 Practices that teachers and educators draw on, to inform all aspects of their curriculum decision-making. The learning trajectories connect to all EYLF V2.0 Practices and specifically those listed in this section.**



### Play-based learning and intentionality

The learning trajectories enable you to identify where the child's learning and development might be. This provides you with information to support the intentionality of planning and responsive interactions with children throughout the day.



### Assessment and evaluation for learning, development and wellbeing

The learning trajectories assist with assessment *of, for and as* learning, prompting you to describe and interpret children's learning development and wellbeing. They support your discussions with colleagues, families and other professionals, to deepen shared understandings about each child.

## What you can do next

The following are tips to use the learning trajectories to improve your curriculum and practice:

- Choose one learning trajectory and one EYLF V2.0 Practice that resonates with you the most.

- Notice the connections across the learning trajectory and the EYLF V2.0 Practice. Here are some ideas to prompt your thinking:
  - Take 'Holistic, integrated and interconnected approaches' as an example. Notice the components of children's learning, development and wellbeing that connect across all the learning trajectories, showing that all domains of learning are interconnected, are equally important and need your attention.
  - Consider the implications for 'Responsiveness to children' and how the learning trajectories can help you challenge each child's thinking, respond to their ideas, and engage in their learning.
  - Think about the 'Learning environments' in your service and how the learning trajectory you chose can guide you in the selection and provision of materials, and can inform the way environments are organised and used.
  - Look for 'Cultural responsiveness' and how it is embedded in the learning trajectory, inviting you to honour differences, respond to children's individual needs, and challenge your own assumptions and those of others.
  - Read through 'Continuity of learning and transitions'. Think about the way the learning trajectory can help you provide continuity for each child during the transitions they encounter between home, the ECEC service and other settings.

### Reflection activity 2

What are the 3 key ideas that you are going to unpack further and why? How are these key ideas going to be beneficial in your everyday practice, and in supporting children's learning, development and wellbeing?



## EYLF Planning Cycle

The learning trajectories support all stages of the planning cycle, in the EYLF V2.0 as outlined in this section.



### Observe

listen/collect  
information

The learning trajectories provide an opportunity for you to know what to look for in relation to different aspects of children's learning, development and wellbeing.

### Assess

analyse/interpret

The learning trajectories help you to understand children's individual strengths and capabilities, and to understand what happens next along the continuum.

### Plan

design

The learning trajectories assist you to thoughtfully analyse the information you have gathered. They help you plan for, and extend, children's learning, development and wellbeing.

### Implement

enact

The learning trajectories offer suggestions for intentional teaching strategies in each domain.

### Evaluate

critically reflect

The learning trajectories assist you in identifying unanticipated outcomes, and whether the implementation supported or extended children's learning, development and wellbeing.

'The EYLF planning cycle' by the [Australian Children's Education and Care Quality Authority](#), used under a [CC BY 4.0 licence](#).

## What you can do next

The following are tips to use the learning trajectories to improve your curriculum and practice:

- Choose one learning trajectory to begin using in your everyday practice. Once you feel confident, choose another one, and gradually build towards using the whole set.
- Keep in mind words and ideas from the learning trajectories while you observe and collect information about children's learning, development and wellbeing. Remember that individual children have different ways to demonstrate their progress in each domain.
- Use the learning trajectories to interpret the observations and information you collect across the curriculum. Notice domains where you have the strongest evidence of children's progress, and any gaps you could explore.
- Once you are confident using multiple learning trajectories, try using several of them to analyse a single observation. If you have a video of children's play, watch it a few times, looking for different domains each time. This will help you understand how the domains are interconnected.
- Use the learning trajectories to identify opportunities to enhance your curriculum. This might include planning experiences that focus on specific aspects of learning, or staying alert for opportunities to extend learning during your spontaneous interactions with children.
- Use the learning trajectories to reflect on how well the curriculum is working for each child, taking into account each child's unique strengths and progress.



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### Reflection activity 3

The [EYLF planning cycle](#) shows how the learning trajectories can help with the decisions you make, at each stage of the planning cycle.

How can you use the learning trajectories in each stage of planning?  
What might this look like in your context?

## EYLF Learning Outcomes

The EYLF V2.0 sets out 5 integrated Learning Outcomes for children. The learning trajectories describe specific ‘building blocks’ of learning, development and wellbeing that contribute to achieving these outcomes.

You can use the learning trajectories to deepen your understanding of how children learn and develop, by following these steps:



### Understanding specific domains of learning

The learning trajectories break each domain into parts (called ‘subdomains’, ‘strands’ and ‘indicators’) to show the many ‘building blocks’ that make up children’s learning.



### Knowing how children learn and develop over time

The learning trajectories show how each stage of learning builds on what has gone before, and also provides the foundation for later stages of learning.



### Unpacking the EYLF V2.0 Learning Outcomes

The ‘building blocks’ described in the learning trajectories can contribute to the EYLF V2.0 Learning Outcomes in many ways. Reflecting on connections between the domains and Learning Outcomes can deepen your understanding of the EYLF V2.0.

## What you can do next

The following are tips to use the learning trajectories to understand how children learn and develop:

- Choose one learning trajectory to start with. This could be a domain you already know well or perhaps one that is less familiar to you.
- Read through the learning trajectory, noticing the different subdomains and strands, and the differences between the indicators within each strand.
- Notice the specific vocabulary used for this domain, including words you already use, and any words or ideas that might be new to you.
- Reflect on how children’s progress in this domain contributes to the EYLF V2.0 Learning Outcomes, using the [Reflection activity 4](#) and [Reflection activity 5](#) as a prompt for your own ideas.
- Where possible, discuss what you have learned about this domain with your colleagues, to exchange knowledge and build shared understanding.
- If you want to know more, read the [Early Childhood Learning Trajectories: The Evidence Base](#), which includes references for further reading.

### Reflection activity 4

Table 1 shows examples of how each domain in the learning trajectories contributes to the holistic outcomes of the EYLF V2.0. The phrases in quotation marks come from the relevant learning trajectory. Can you think of other examples?

Try these tips:

- **Choose a phrase** from one of the indicators (boxes) that describes what you might see children doing.
- **Reflect** on how this phrase relates to the EYLF V2.0 Learning Outcomes. Many phrases may relate to more than one outcome.
- **Repeat** this for a whole row (learning trajectory domain) or column (EYLF V2.0 Learning Outcomes). Try to find an example for each box.
- **Share** your ideas with a colleague and discuss whether they see the connections in the same way. They may have new ideas too.

Remember that reflection is about stretching your thinking, not finding the 'right' answer. It is a process of ongoing learning.

### Reflection activity 5

Use Table 2 to collect examples within the context of your setting:

- Revisit and reflect on this individually and with colleagues, to deepen your knowledge and understanding of the learning trajectories and EYLF V2.0 Learning Outcomes.
- Use it with new team members to support them in making the link between learning trajectories and the EYLF V2.0 Learning Outcomes.



Image credit: iStock.com/FatCamera

**Table 1:** Examples of how learning trajectory domains contribute to EYLF V2.0 outcomes

Learning trajectory domains	EYLF V2.0 Learning Outcomes				
	Children have a strong sense of identity	Children are connected to and contribute to their world	Children have a strong sense of wellbeing	Children are confident and involved learners	Children are effective communicators
<b>Executive functions</b>	When children ‘resist distractions more easily’, they can focus on doing what matters to them.	When children ‘stop or pause some behaviours’, it contributes to a calm environment in the room.	When children ‘recall and follow simple instructions’, they can manage wellbeing tasks.	When children ‘enjoy exploring new information and ideas’, their appetite for learning increases.	When children ‘show interest in alternative perspectives’, they engage in richer conversations.
<b>Social and emotional learning</b>	When children can ‘describe their own strengths’, it contributes to a strong sense of self.	When children ‘recognise that others have different needs’, they can notice ways to help others.	When children ‘anticipate and plan ahead for difficult situations’, they can respond with confidence.	When children ‘use more complex social strategies’, they can participate more in collaborative learning.	When children ‘deliberately choose ways to express themselves’, they develop their own communication style.
<b>Mathematical thinking</b>	When children ‘frame and investigate questions and wonderings using mathematical ideas’, they deepen their own understanding.	When children ‘participate in regular routines’, they can predict what they need to do to contribute to them.	When children ‘use their bodies to explore’, they can orient themselves with confidence and seek spaces they like.	When children ‘investigate the world more purposefully, collecting information about topics of interest’, they become self-directed learners.	When children ‘use drawings to represent quantity’, they can better communicate their mathematical thinking.
<b>Language and communication</b>	When children ‘use single words with increasing clarity’ in their home language, they build their own unique vocabulary.	When children ‘show awareness of the purpose of writing’, they can learn how writing makes a difference in the world.	When children ‘engage with others to create meaning’, they build a sense of belonging.	When children ‘pretend to read, retelling familiar stories’, they share their understandings of the process of storytelling.	When children ‘babble, vocalise and make first approximations of words’, they may be using this as their means of verbalising their thoughts.
<b>Physical development</b>	When children ‘communicate needs for movement or rest’, they are recognising their own preferences or desires.	When children ‘use their senses to understand the world’, they can explore, investigate and participate in play.	When children ‘begin to coordinate movement in their arms, legs and body’, they can move around confidently and safely.	When children ‘use more complex small objects’, they can learn about the purpose and function of those objects.	When children ‘respond to sights, sounds, smells, textures and tastes’, they can describe or show how that makes them feel.

**Table 2:** Template for recording how learning trajectory domains contribute to EYLF V2.0 outcomes

Learning trajectory domains	EYLF V2.0 Learning Outcomes				
	Children have a strong sense of identity	Children are connected to and contribute to their world	Children have a strong sense of wellbeing	Children are confident and involved learners	Children are effective communicators
Executive functions					
Social and emotional learning					
Mathematical thinking					
Language and communication					
Physical development					

# Early childhood learning trajectories

## Executive functions

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# Executive functions

## What are executive functions?

Executive functions (EFs) are a set of skills that enable humans to control impulses, stay focused, prioritise, and achieve our goals. They have been described as an ‘air traffic control system’ for the brain. EFs include 3 higher-order thinking skills that emerge during early childhood:

- [Working memory](#) emerges first. It enables the brain to retain and use new and increasingly complex information for a short period of time.
- [Inhibitory control](#) emerges next. It is the ability to use thoughtful, rather than automated, responses and stay focused while managing distractions.
- [Cognitive flexibility](#) emerges last. It is the brain’s ability to switch perspectives and refocus attention.

These skills continue developing throughout the early years, reinforcing and supporting one another, as well as providing the foundation for many other capabilities and behaviours.

EFs support the high-level thinking skills necessary for planning, problem-solving and goal-directed behaviours. EFs are also closely related to self-regulation or self-management, which enable children to control emotional impulses and behaviour. The cognitive component of self-regulation depends on EFs, for thinking as well as feeling.



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### Early Years Learning Framework

AERO’s Early Childhood Learning Trajectories align with the principles, practices and outcomes of the [Early Years Learning Framework V2.0](#). The [introduction](#) provides further information and demonstrates how the Learning Outcomes can be mapped to domains.

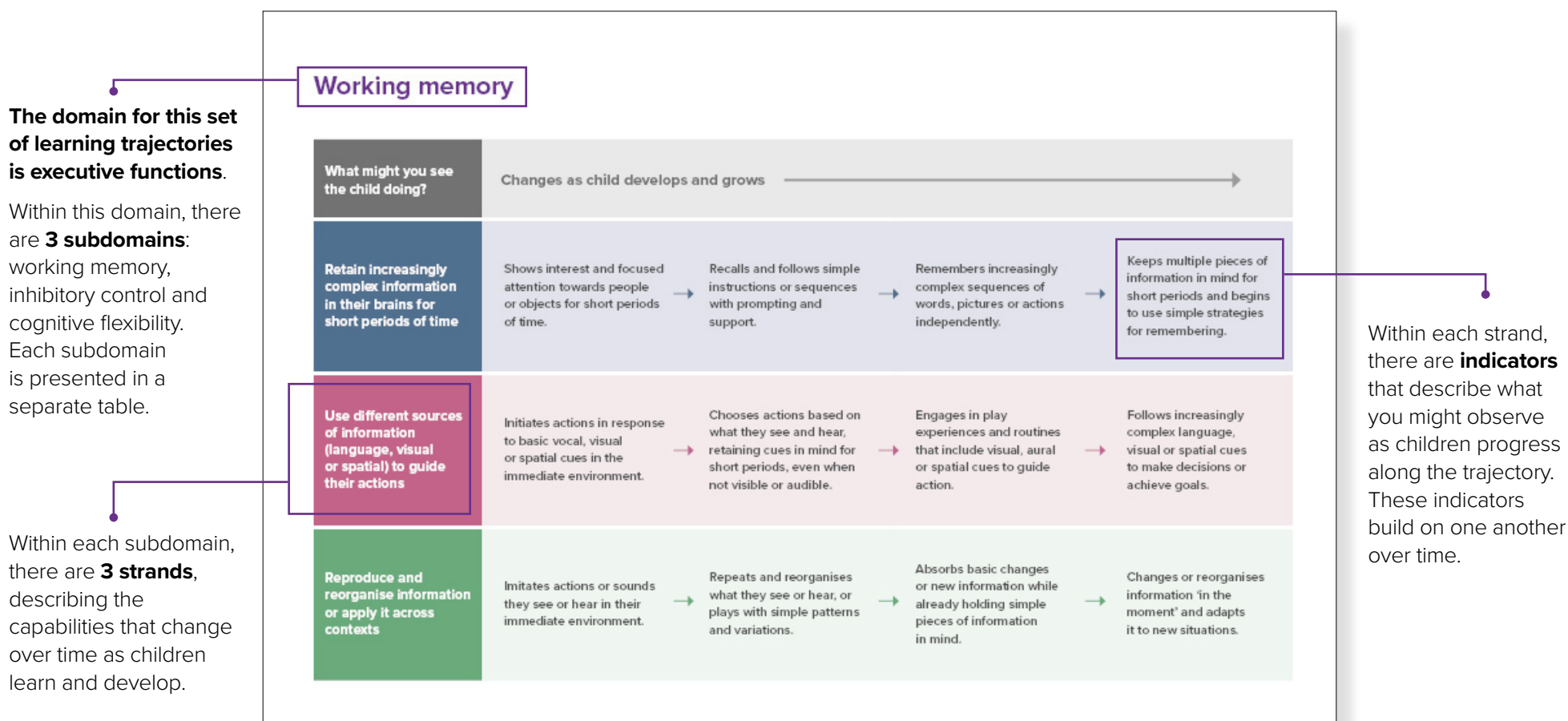
### National Quality Standard

[Quality Area 1 – Educational program and practice](#)

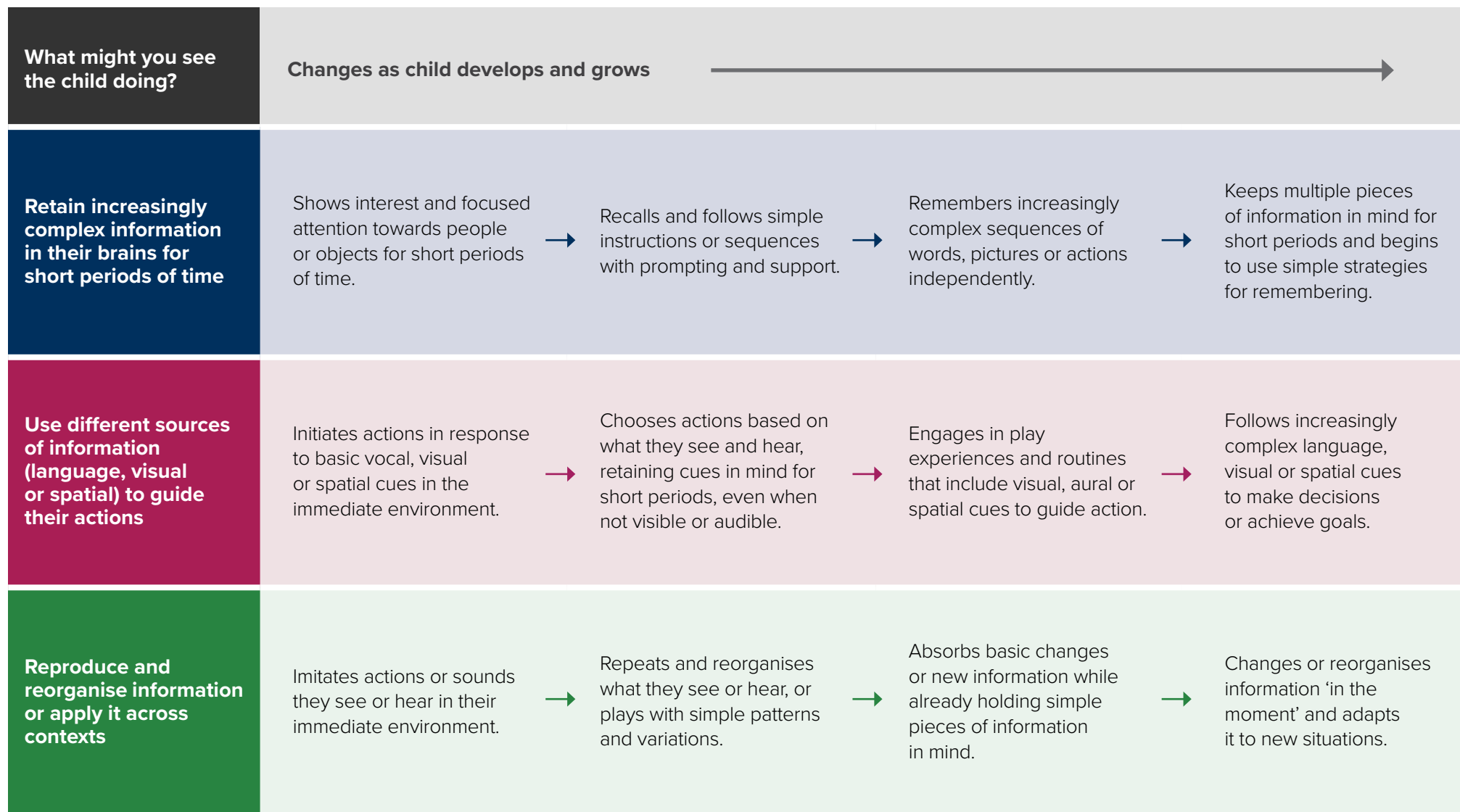


## How to use the executive function learning trajectories

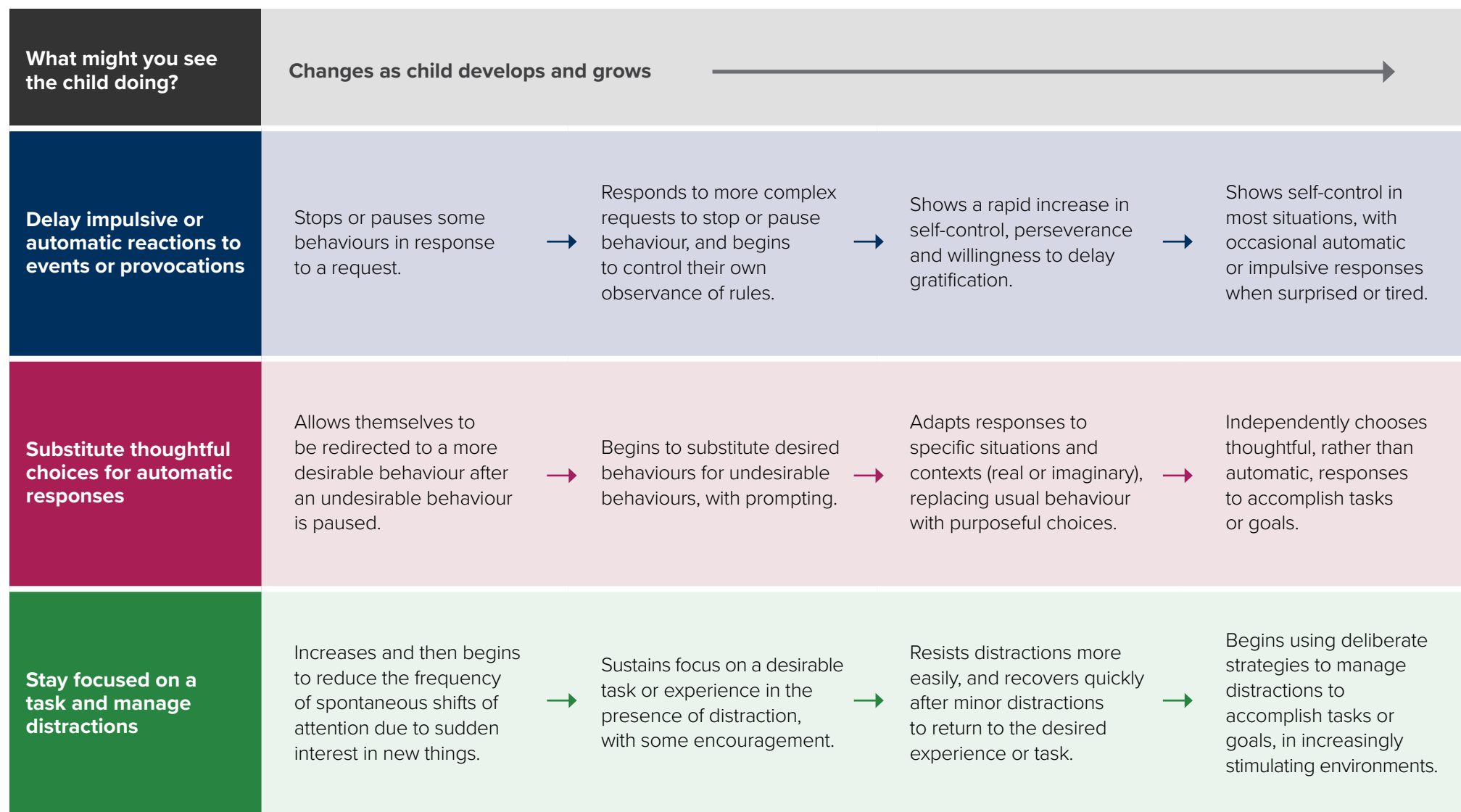
These learning trajectories will help you observe children’s progress in executive functions and plan the next steps in their learning and development. They provide language and ideas for documenting children’s learning and development, and for your conversations with families and colleagues about children’s progress. The trajectory is not a checklist. You are encouraged to use your professional knowledge and judgement in determining how each child may demonstrate progress along each trajectory, and how best to support their learning.



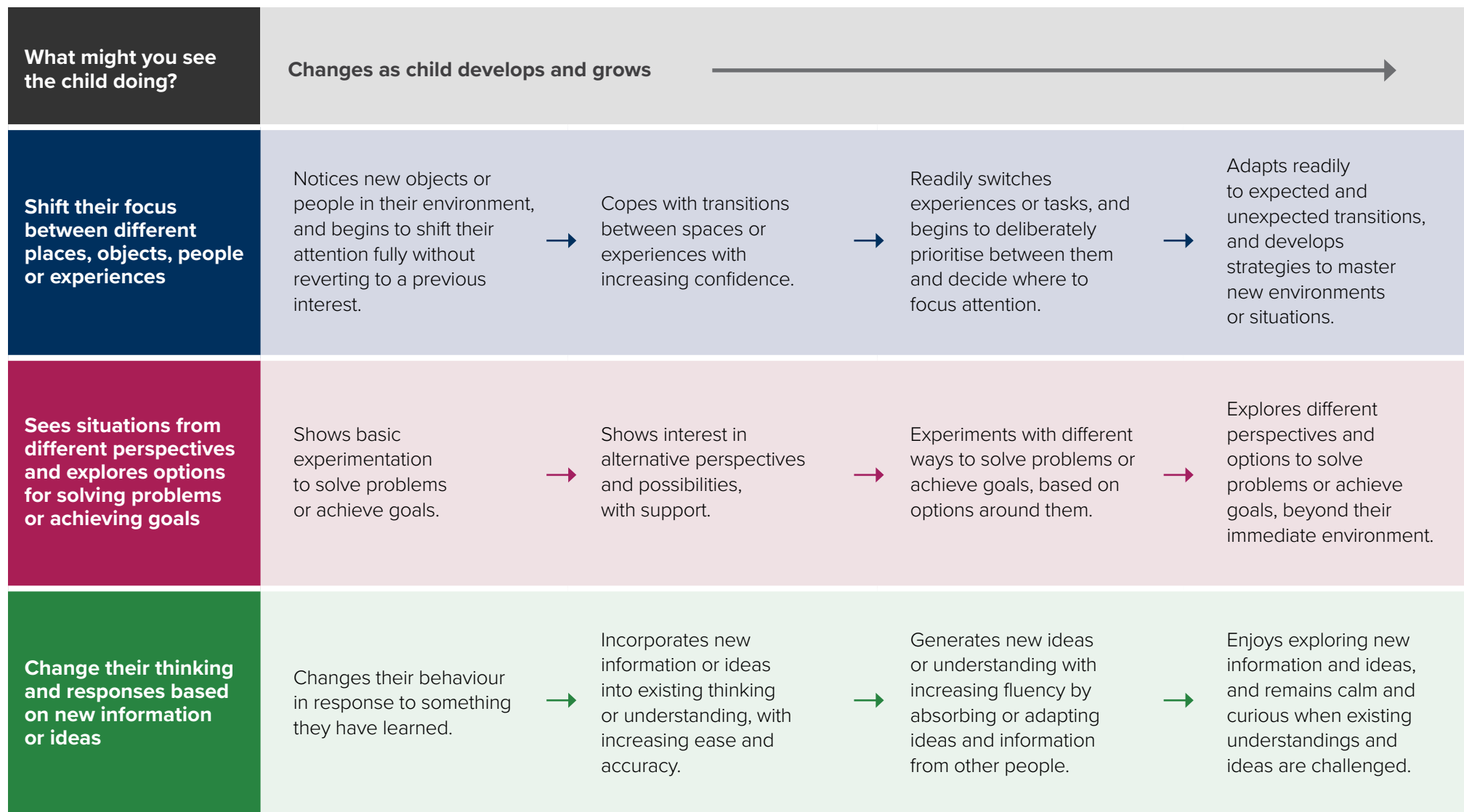
## Working memory



## Inhibitory control



## Cognitive flexibility



## Creating opportunities to support children's executive function skills

### Working memory

- Encourage children to take breaks to calm their mind between periods of focus, to prevent being overwhelmed or overloaded.
- Engage in experiences where children remember and repeat actions, sounds or words, adding small changes on each repetition.
- Use 2-way conversations to practice absorbing and manipulating new information, gradually increasing complexity when the child shows signs of readiness.
- Involve children in helping with tasks that include sequences of actions or simple instructions, or ask them to teach these steps to others.

### Inhibitory control

- Play games that encourage children to wait, persist or resist temptation. For example, Hide and Seek or singing songs during wait times in routines.
- Engage in experiences involving turn taking or paying attention and suppressing reactions. For example, Simon Says or Red Light, Green Light.
- Help children set their own rules and limits in play, such as designating roles or actions, or defining the physical space or resources.
- Encourage children to share responsibility for routines that involve delaying gratification (such as packing up before going outside).

### Cognitive flexibility

- Prepare children for transitions in daily routines by alerting them in advance and using action songs as prompts.
- Encourage children to make decisions and share opinions in a range of situations, exploring options in new and familiar environments.
- Use 'wondering aloud' and open-ended questioning to explore different perspectives and possibilities.
- Experiment and problem solve with children, encouraging them to overcome challenges with 'just enough' support.
- Engage in experiences that involve change and flexible thinking (such as manipulating different objects or playing games with changing rules).

# Early childhood learning trajectories

## **Social and emotional learning**

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# Social and emotional learning

## What is social and emotional learning?

Social and emotional learning (SEL) involves skills such as children distinguishing their own needs from those of others, learning to effectively identify and manage emotions, and building and maintaining positive relationships with others. Social and emotional learning includes 4 main components:

- Self-awareness: the child's emerging awareness of their uniqueness in relation to others, and of their own individual emotions, perspectives and capabilities.
- Self-management: ability to manage emotions and their triggers, regulate responses and behaviour, and cope in increasingly challenging situations.
- Social awareness: ability to understand others' feelings, preferences and perspectives, and to care for other people, animals and non-living things.
- Social management: ability to interact effectively and respectfully with others, using a range of social strategies to collaborate and build positive relationships.

### Early Years Learning Framework

AERO's Early Childhood Learning Trajectories align with the principles, practices and outcomes of the [Early Years Learning Framework V2.0](#). The [introduction](#) provides further information and demonstrates how the Learning Outcomes can be mapped to domains.

### National Quality Standard

[Quality Area 5 – Relationships with children](#)



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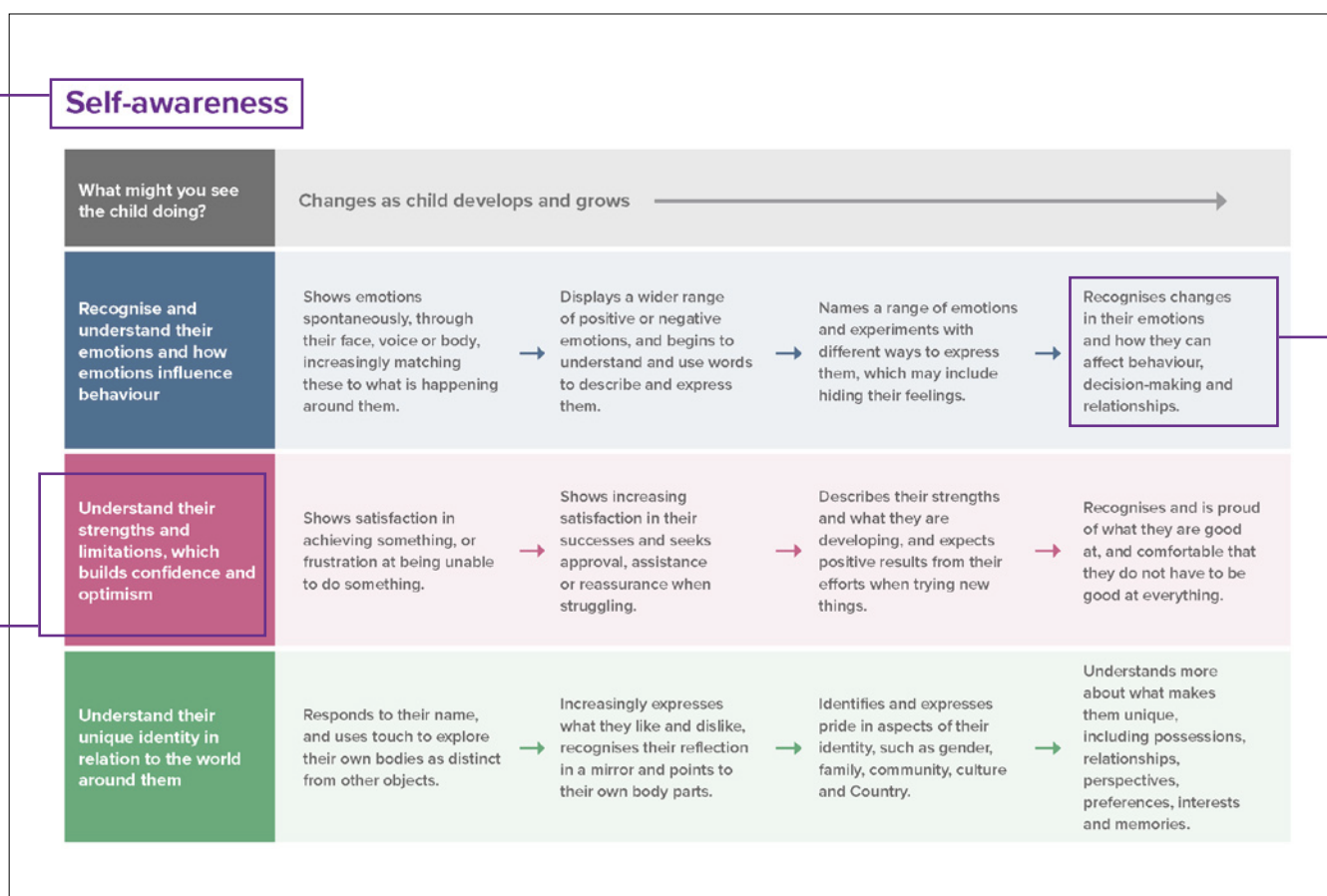
## How to use the social and emotional learning trajectories

These learning trajectories will help you observe children’s progress in social and emotional learning, and plan the next steps in their learning and development. They will give you language and ideas for documenting children’s learning and development, and for your conversations with families and colleagues about children’s progress. The trajectory is not a checklist. You are encouraged to use your professional knowledge and judgement in determining how each child may demonstrate progress along each trajectory, and how best to support their learning.

The domain for this set of learning trajectories is social and emotional learning.

Within this domain, there are **4 subdomains**: self-awareness, self-management, social awareness and social management. Each subdomain is presented in a separate table.

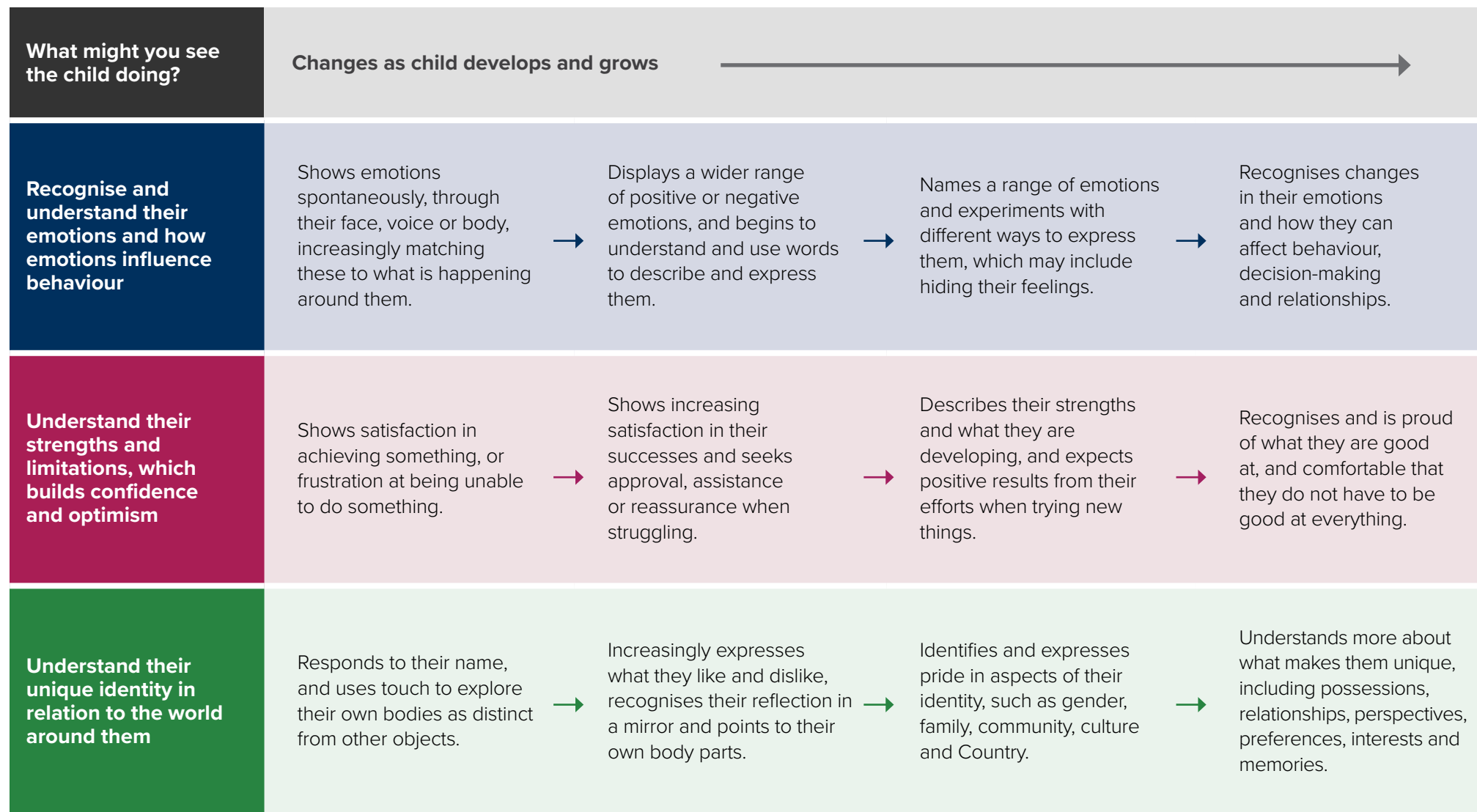
Within each subdomain, there are **3 strands**, describing the capabilities that change over time as children learn and develop.



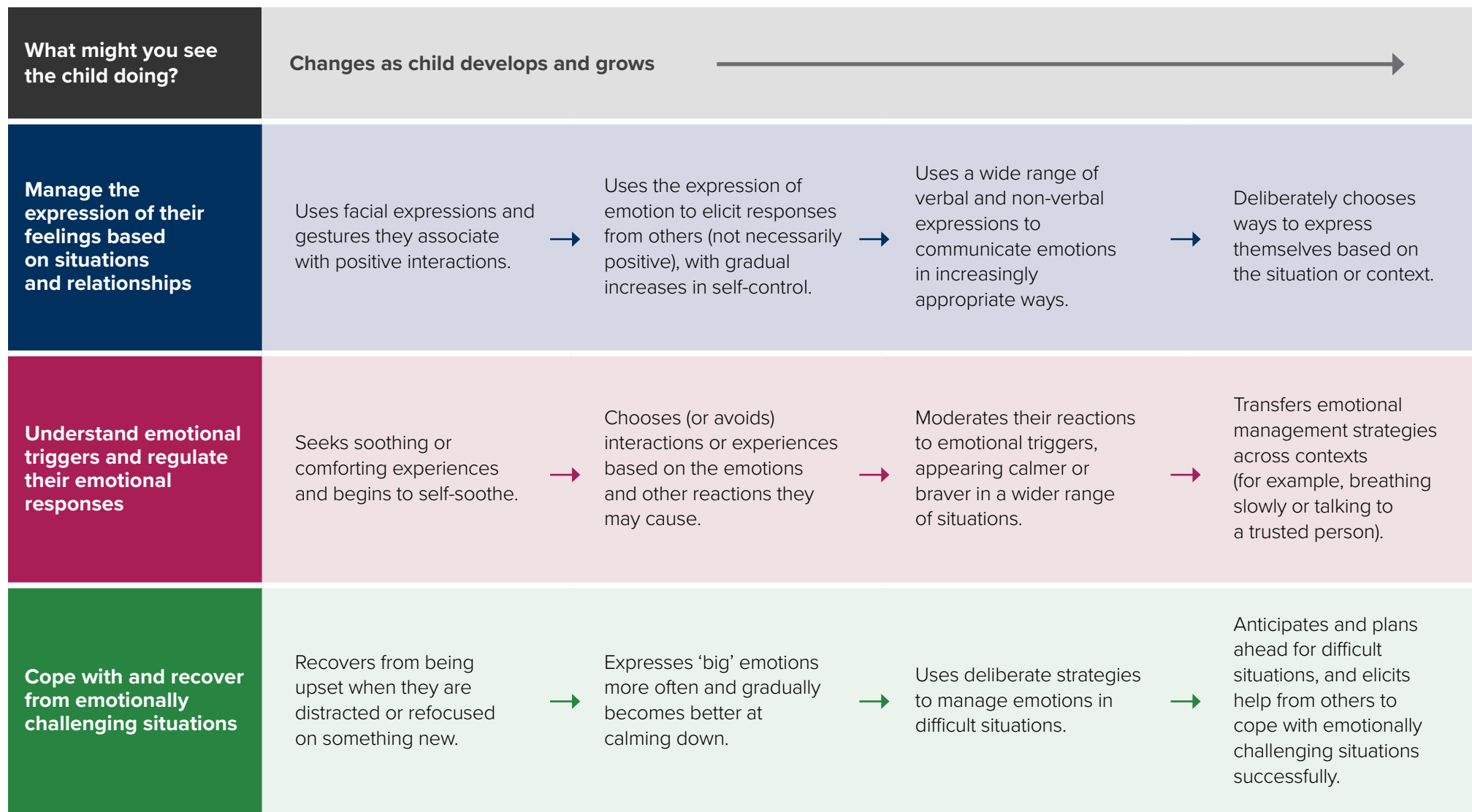
Within each strand, there are **indicators** that describe what you might observe as children progress along the trajectory. These indicators build on one another over time.



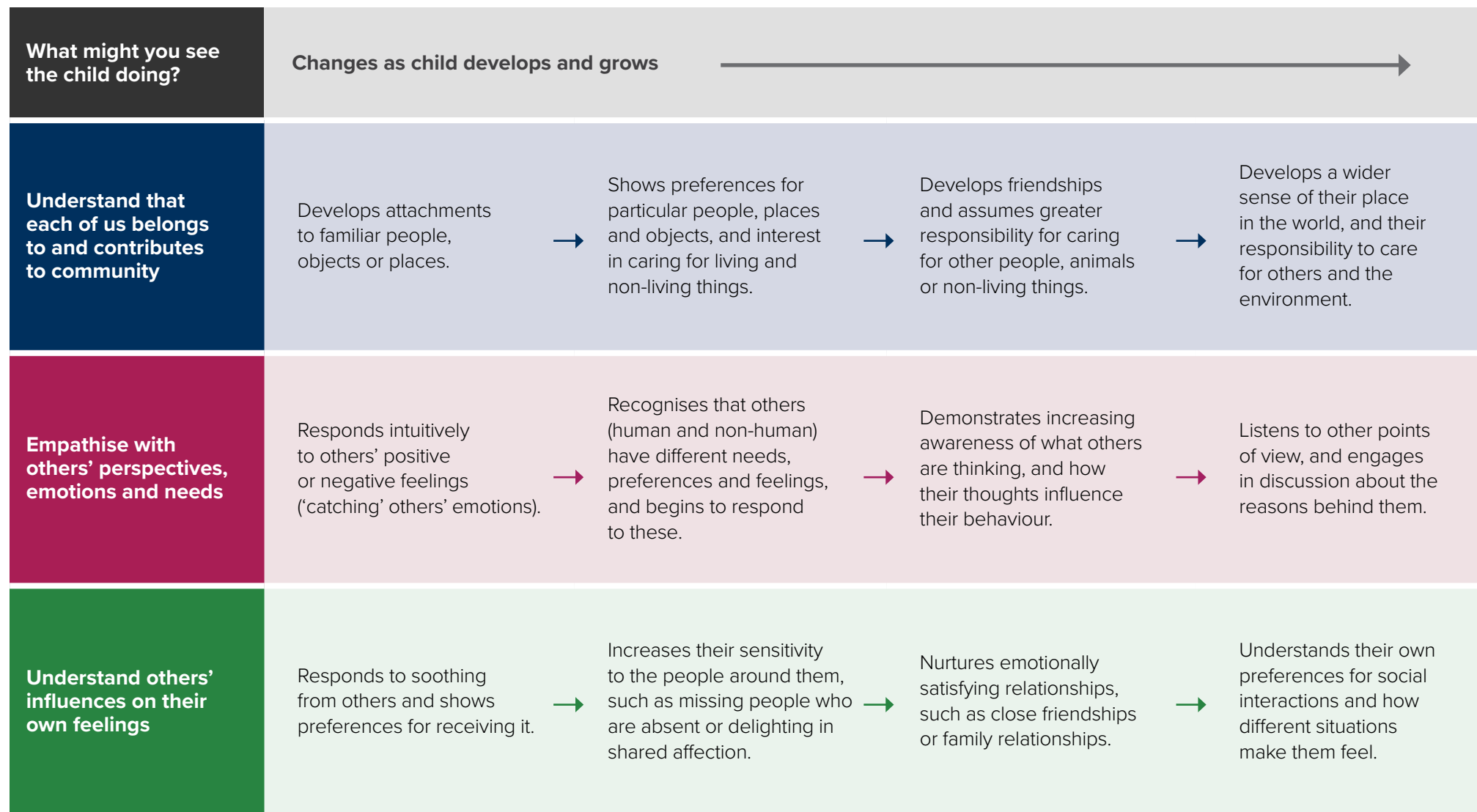
# Self-awareness



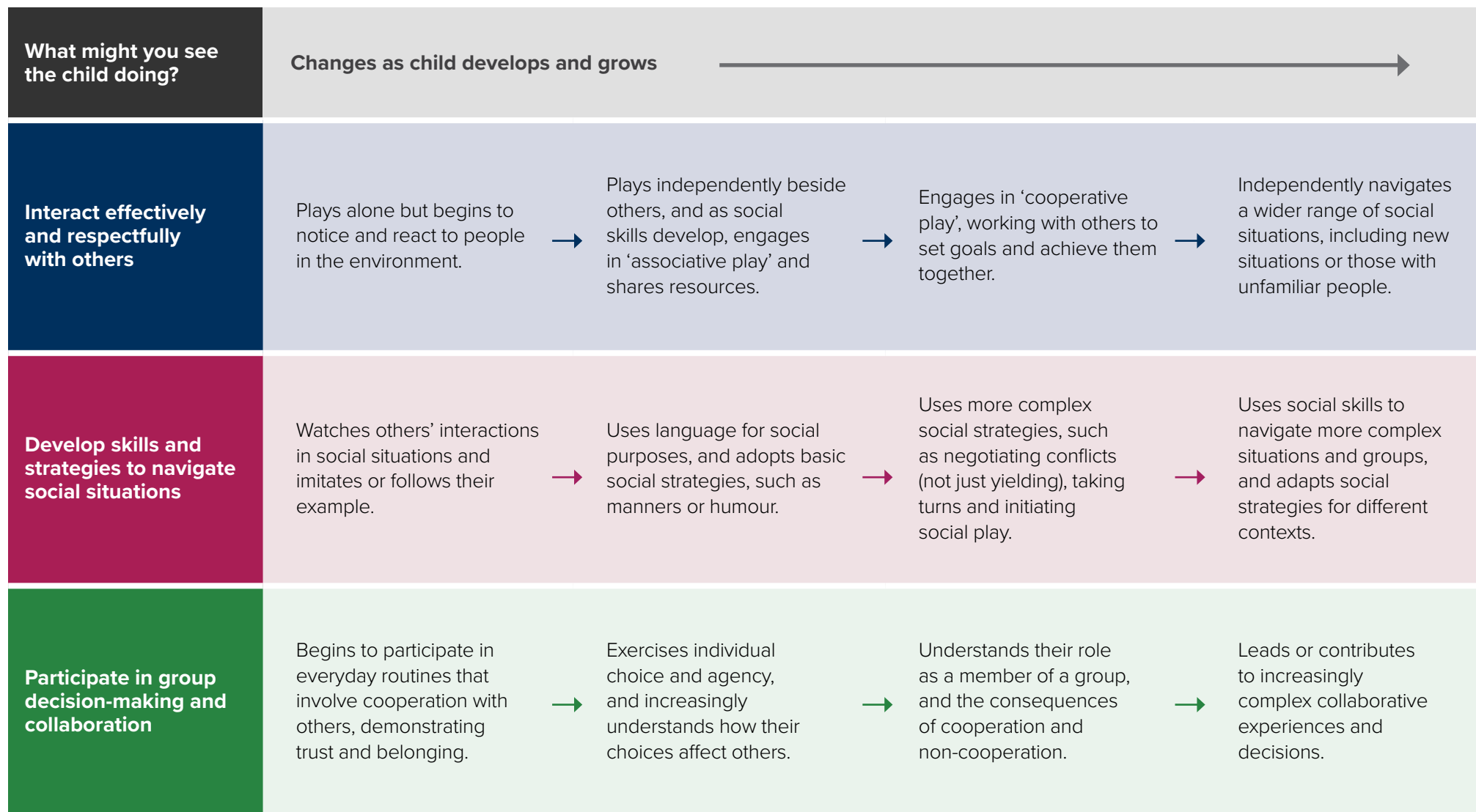
## Self-management



## Social awareness



## Social management



## Creating opportunities to support children's social and emotional learning and development

### Self-awareness

- Notice children's emotional responses during the day (such as at drop-off) and help them discover experiences they might enjoy.
- Respond to children's emotional cues, interests and achievements, and model language, actions and expressions.
- Encourage children to explore their own identity and feelings, and take on different identities (such as in imaginary and role play).

### Self-management

- Notice and discuss children's feelings throughout the day, helping them recognise and express both positive and negative emotions.
- Anticipate situations which may challenge children to manage their emotions, and gently encourage them to regulate their own feelings.
- Model and discuss the impact children's emotions can have on others, including by responding visibly to infants' emotional cues.

### Social awareness

- Create a sense of community connection by encouraging children to be aware of people, Country, and physical and natural environments.
- Encourage children to give and receive emotional support, and actively foster a positive emotional climate in rooms or groups.
- Encourage children to experience different social situations (such as large and small groups or 'alone time') to explore their social preferences.

### Social management

- Help children notice the social skills they are learning, such as listening, turn-taking, decision-making, negotiation and collaboration.
- Provide a variety of opportunities for individual, paired and small-group experiences, role-modelling these skills.
- Encourage children to interact with you and facilitate their interactions with other children. Remember to do things 'with' rather than 'to' children.

## Early childhood learning trajectories

# Mathematical thinking

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# Mathematical thinking

## What is mathematical thinking?

Mathematical thinking is embedded in children's everyday lives. Research shows mathematical thinking and learning starts in infancy and develops into adulthood. It includes learning about mathematical concepts and applying them in everyday situations. Mathematical thinking involves 4 subdomains, including these skills and ways of thinking:

- Patterns and predictions: noticing patterns (repetition of 2 or more items) and predicting what comes next, which is the foundation of mathematical and logical thinking.
- Shapes and spatial thinking: describing physical objects, including what type of object they are (and why), their position relative to each other and their direction of movement.
- Measurement and data: understanding units of measurement (for example, length, weight and area) and using broader mathematical knowledge to answer simple questions through a process of collecting, interpreting, representing and communicating information.
- Quantity and counting: naming numbers in sequence and connecting them to quantities, and using actions, objects or numbers to represent quantities symbolically.



Image credit: iStock.com/FatCamera

### Early Years Learning Framework

AERO's Early Childhood Learning Trajectories align with the principles, practices and outcomes of the [Early Years Learning Framework V2.0](#). The [introduction](#) provides further information and demonstrates how the Learning Outcomes can be mapped to domains.

### National Quality Standard

[Quality Area 1 – Educational program and practice](#)

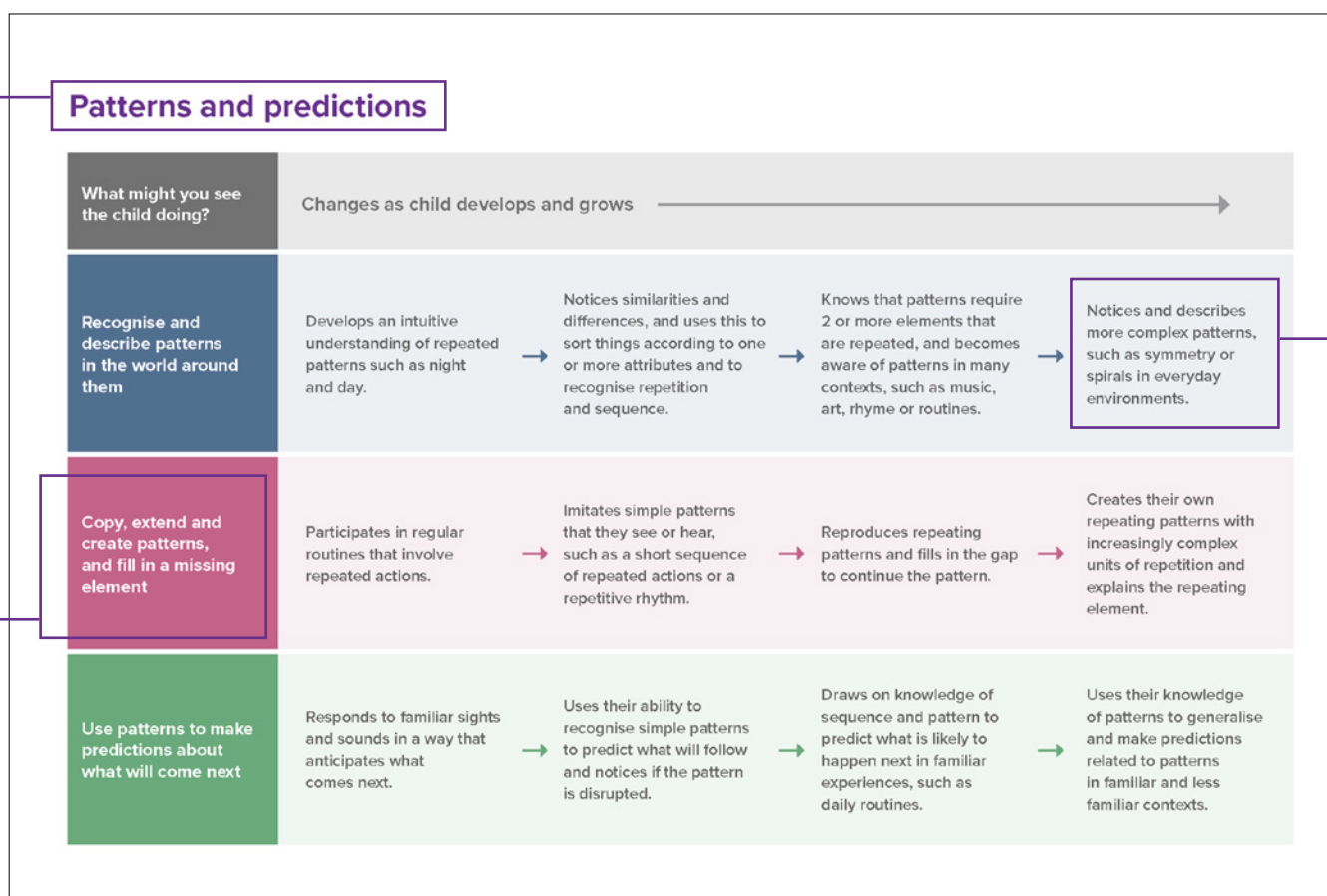
## How to use the mathematical thinking learning trajectories

These learning trajectories will help you observe children’s progress in mathematical thinking. They will give you language and ideas for documenting children’s learning and development, and for your conversations with families and colleagues about children’s progress. The trajectory is not a checklist. You are encouraged to use your professional knowledge and judgement in determining how each child may demonstrate progress along each trajectory, and how best to support their learning.

The domain for this set of learning trajectories is mathematical thinking.

Within this domain, there are **4 subdomains:** patterns and predictions, shapes and spatial thinking, measurement and data, and quantity and counting. Each subdomain is presented in a separate table.


Within each subdomain, there are **3 strands,** describing the capabilities that change over time as children learn and develop.



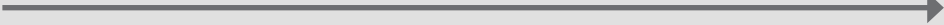
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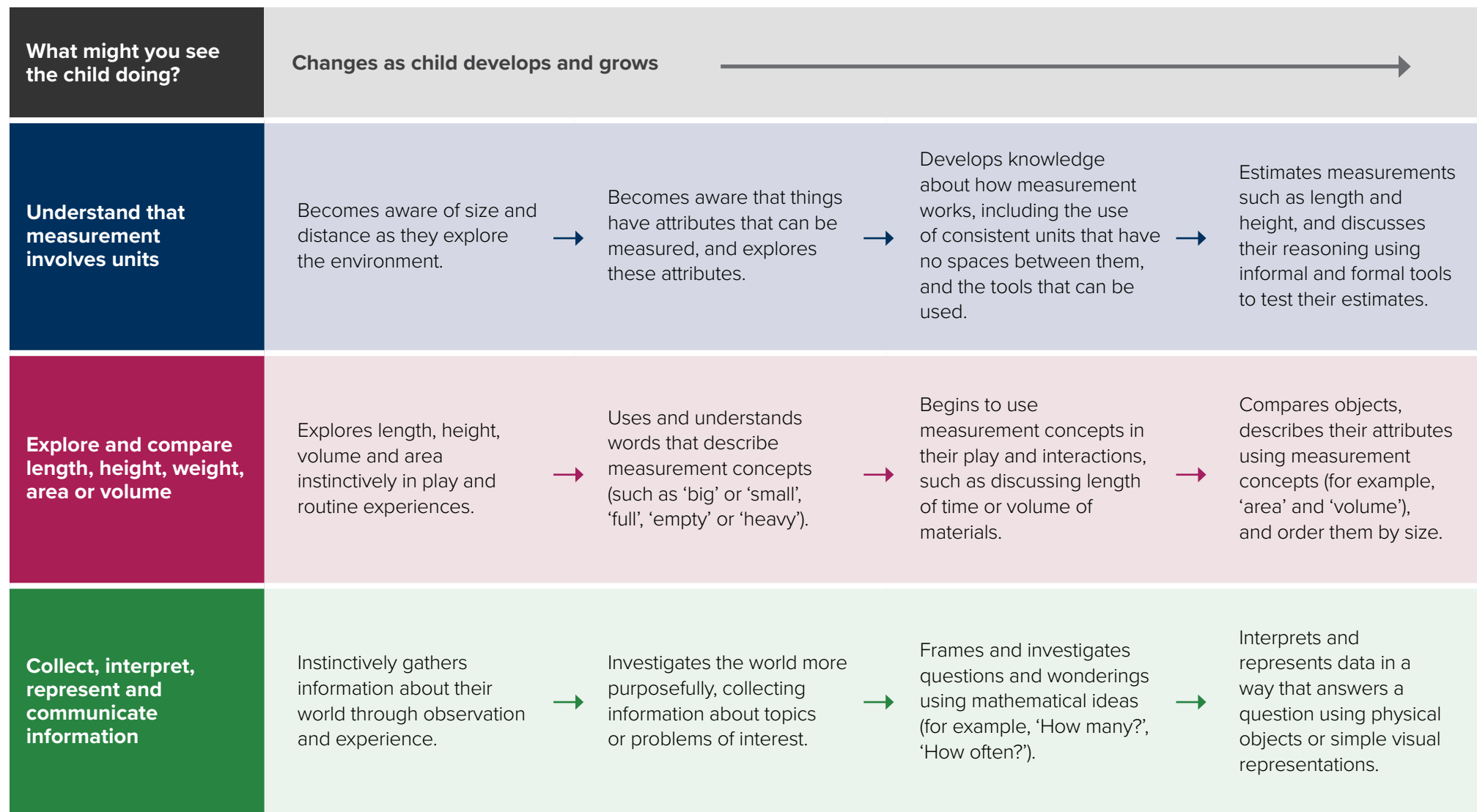
## Patterns and predictions

<p><b>What might you see the child doing?</b></p>	<p><b>Changes as child develops and grows</b> </p>			
<p><b>Recognise and describe patterns in the world around them</b></p>	<p>Develops an intuitive understanding of repeated patterns such as night and day.</p>	<p>→ Notices similarities and differences, and uses this to sort things according to one or more attributes and to recognise repetition and sequence.</p>	<p>→ Knows that patterns require 2 or more elements that are repeated, and becomes aware of patterns in many contexts, such as music, art, rhyme or routines.</p>	<p>→ Notices and describes more complex patterns, such as symmetry or spirals in everyday environments.</p>
<p><b>Copy, extend and create patterns, and fill in a missing element</b></p>	<p>Participates in regular routines that involve repeated actions.</p>	<p>→ Imitates simple patterns that they see or hear, such as a short sequence of repeated actions or a repetitive rhythm.</p>	<p>→ Reproduces repeating patterns and fills in the gap to continue the pattern.</p>	<p>→ Creates their own repeating patterns with increasingly complex units of repetition and explains the repeating element.</p>
<p><b>Use patterns to make predictions about what will come next</b></p>	<p>Responds to familiar sights and sounds in a way that anticipates what comes next.</p>	<p>→ Uses their ability to recognise simple patterns to predict what will follow and notices if the pattern is disrupted.</p>	<p>→ Draws on knowledge of sequence and pattern to predict what is likely to happen next in familiar experiences, such as daily routines.</p>	<p>→ Uses their knowledge of patterns to generalise and make predictions related to patterns in familiar and less familiar contexts.</p>

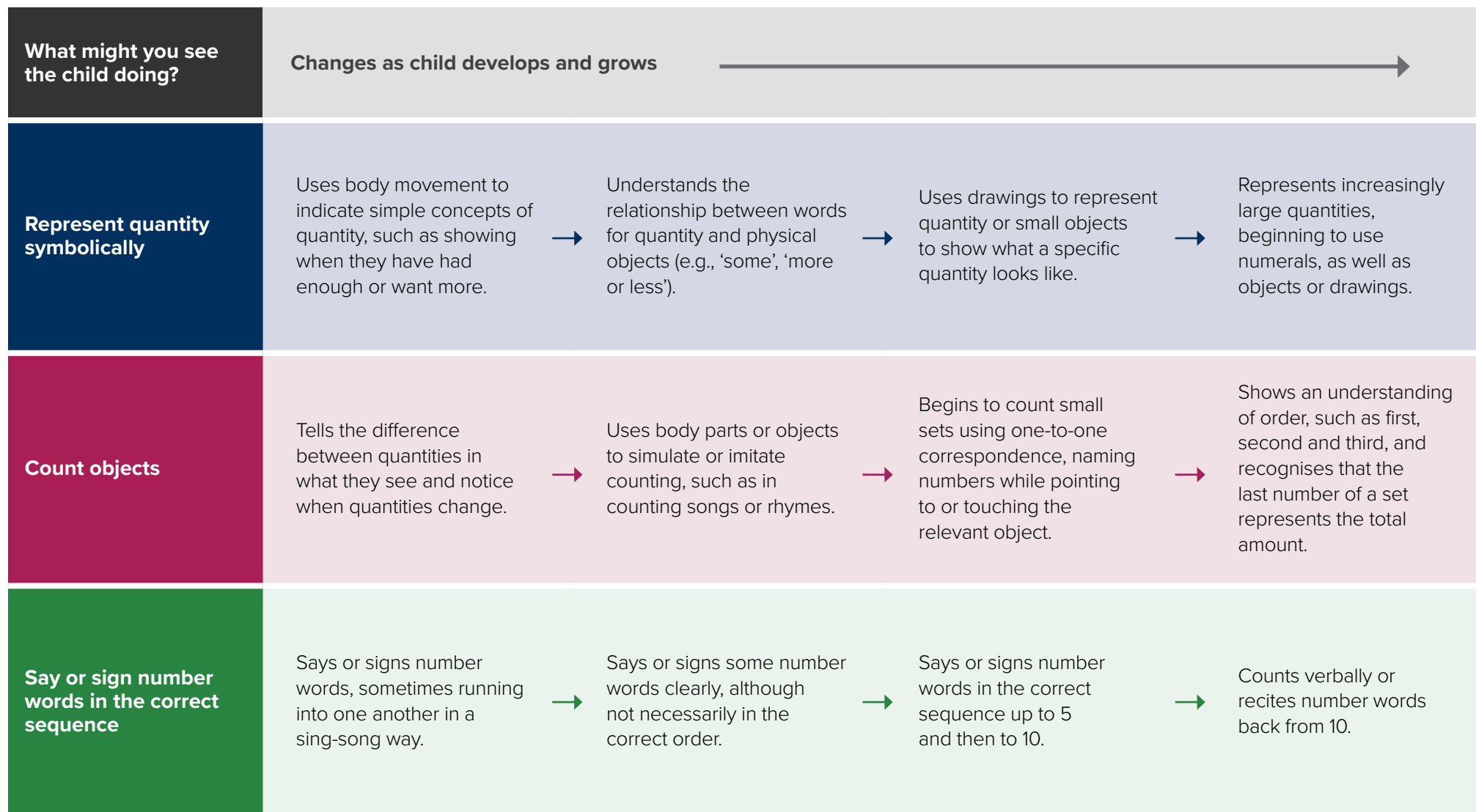
## Shapes and spatial thinking

<p><b>What might you see the child doing?</b></p>	<p><b>Changes as child develops and grows</b> </p>			
<p><b>Recognise and describe shapes and spaces in the world around them</b></p>	<p>Uses their body to explore the shapes and spaces.</p>	<p>→ Begins to match shapes (for example, same), and uses simple words and gestures to describe location and direction (for example, 'there', 'up').</p>	<p>→ Uses more precise language to describe shapes (for example, 'pointy', 'round'), location (for example, 'near') or direction (for example, 'forwards').</p>	<p>→ Describes more complex attributes of shapes (for example, 'sides', 'corners') and explains relative positions (for example, 'on top', 'in front').</p>
<p><b>Manipulate shapes and objects to create new forms or positions</b></p>	<p>Changes the position of their body or an object, or looks at objects from different perspectives.</p>	<p>→ Manipulates shapes and objects experimentally to change their form or position.</p>	<p>→ Manipulates shapes and objects purposefully and accurately.</p>	<p>→ Flips, slides and rotates shapes and objects in accordance with a mental image.</p>
<p><b>Describe and represent the relations between shapes or positions</b></p>	<p>Moves their eyes or body in the direction of a desired object and recognises items are still there even if not visible.</p>	<p>→ Sorts or stacks objects by shape, and organises groups of objects into desired positions.</p>	<p>→ Uses words to describe the location of things in relation to each other (for example, 'beside', 'next to', 'between') and classifies shapes according to their similarities and differences.</p>	<p>→ Connects representations of places and shapes with physical realities (for example, uses a simple map or identifies a three-dimensional object using a two-dimensional image).</p>

## Measurement and data



## Quantity and counting



## Creating opportunities to support children's mathematical thinking

### Patterns and predictions

- Help children to notice patterns in their everyday experiences, including following predictable routines for pre-verbal children.
- Talk about the unit of the pattern that repeats, such as designs on fabric, table settings (such as spoon, fork, cup) or events in the day.
- Help children to become pattern finders by encouraging them to learn about and find 'units of repeat' such as 'ABCABC' or 'blue-red-blue-red'.
- Encourage children to create patterns and play with variations, including drawing, painting, play dough actions and songs.

### Shapes and spatial thinking

- Provide a range of shapes and objects in the physical environment, including large obstacles to navigate and smaller objects to move around.
- Find opportunities to support spatial thinking in interactions with children, describing the position of an object and using shape language.
- Notice and discuss children's purposeful manipulation of shapes and spaces, including in block play, jigsaws, dancing or tidying up.

### Measurement and data

- Encourage children to investigate measurement concepts through play such as exploring size, length, height and weight.
- Demonstrate effective measurement strategies – for example, lining blocks up to measure the length of the table and showing consistency with start and end points, consistency with units of measure (the blocks), and knowing there are no spaces in between each unit.
- Encourage children to estimate the length and height of an object or area and then use informal and formal tools to check and reflect on their initial ideas.

### Quantity and counting

- Show children that counting tells us how many. Draw attention to numerals in the environment (for example, in books, on the clock or on posters).
- Use every opportunity to count verbally (such as in songs and rhymes or in routines) and support children in learning the number words.
- While you count, point to the objects you are counting and move them to one side to show which ones still need to be counted.
- When children tell you 'how many' without counting, ask how they know, count together to check and emphasise the total number.

# Early childhood learning trajectories

## Language and communication

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Emergent writing	44
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# Language and communication

## What is language and communication?

Language and communication are the foundations for all learning and social interaction. They relate to many other aspects of cognitive, physical and social development, beginning in infancy. Language and communication involve 4 main components:

- [Receptive language](#) emerges as children understand what is said to them (verbally and non-verbally) before they can talk, understanding more as they grow.
- [Expressive language](#) includes the ability to make purposeful sounds, words and gestures to convey their thoughts, feelings and ideas to others.
- [Emergent reading](#) describes the early stages of understanding written text. It includes decoding letters and symbols and becoming familiar with written materials.
- [Emergent writing](#) is when children express themselves by making marks and using these to convey meaning, eventually learning letters and using these to form words.

Many Australian children first develop these skills in a language other than English, and partnerships with families can help build on this valuable learning.

### Early Years Learning Framework

AERO's Early Childhood Learning Trajectories align with the principles, practices and outcomes of the [Early Years Learning Framework V2.0](#). The [introduction](#) provides further information and demonstrates how the Learning Outcomes can be mapped to domains.

### National Quality Standard

[Quality Area 1 – Educational program and practice](#)



Image credit: iStock.com/santypan

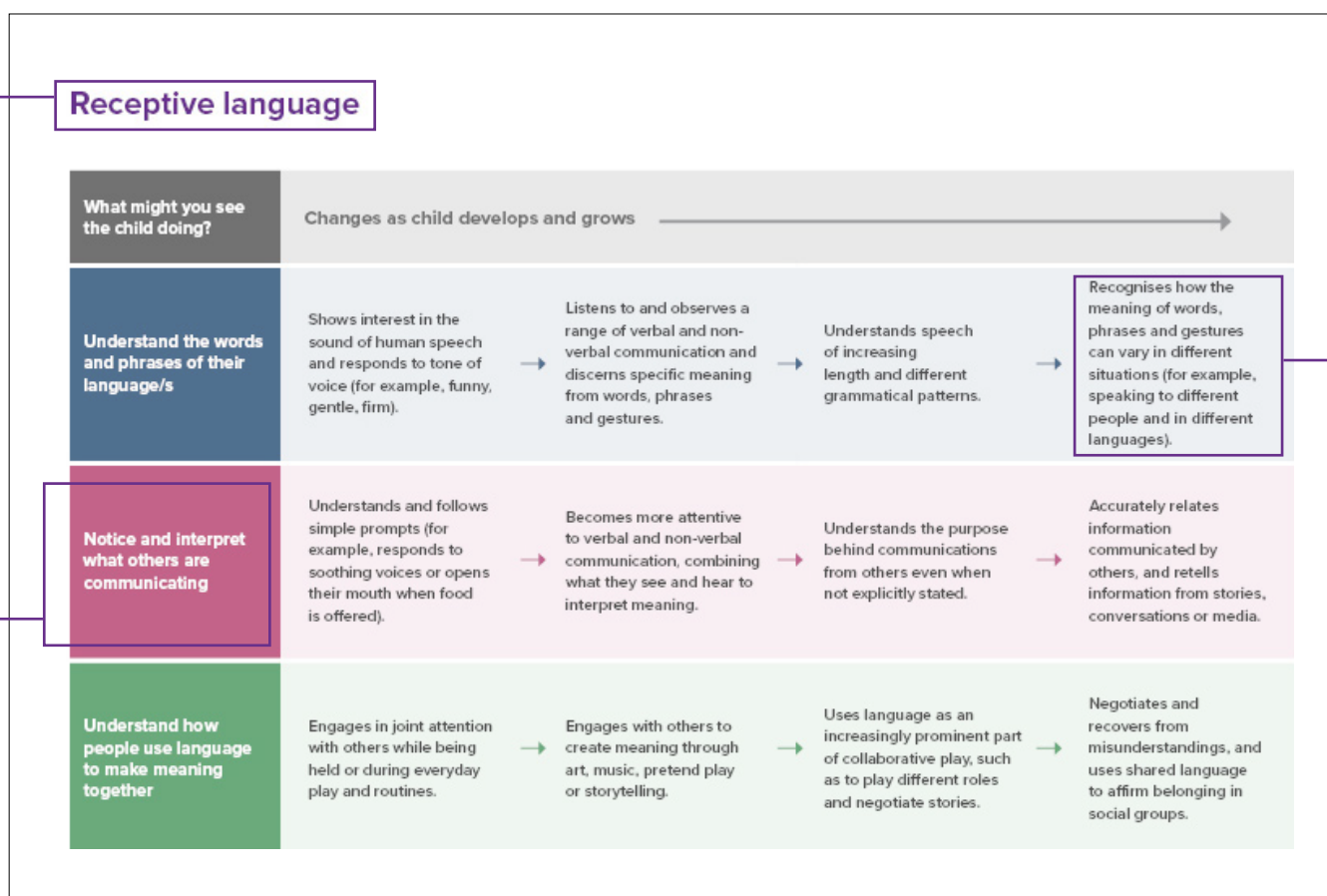
## How to use the language and communication learning trajectories

These learning trajectories will help you observe children’s progress in language and communication. They will give you language and ideas for documenting children’s learning and development, and for your conversations with families and colleagues about children’s progress. The trajectory is not a checklist. You are encouraged to use your professional knowledge and judgement in determining how each child may demonstrate progress along each trajectory, and how best to support their learning.

The domain for this set of learning trajectories is language and communication.

Within this domain, there are **4 subdomains**: receptive language, expressive language, emergent reading and emergent writing. Each subdomain is presented in a separate table.

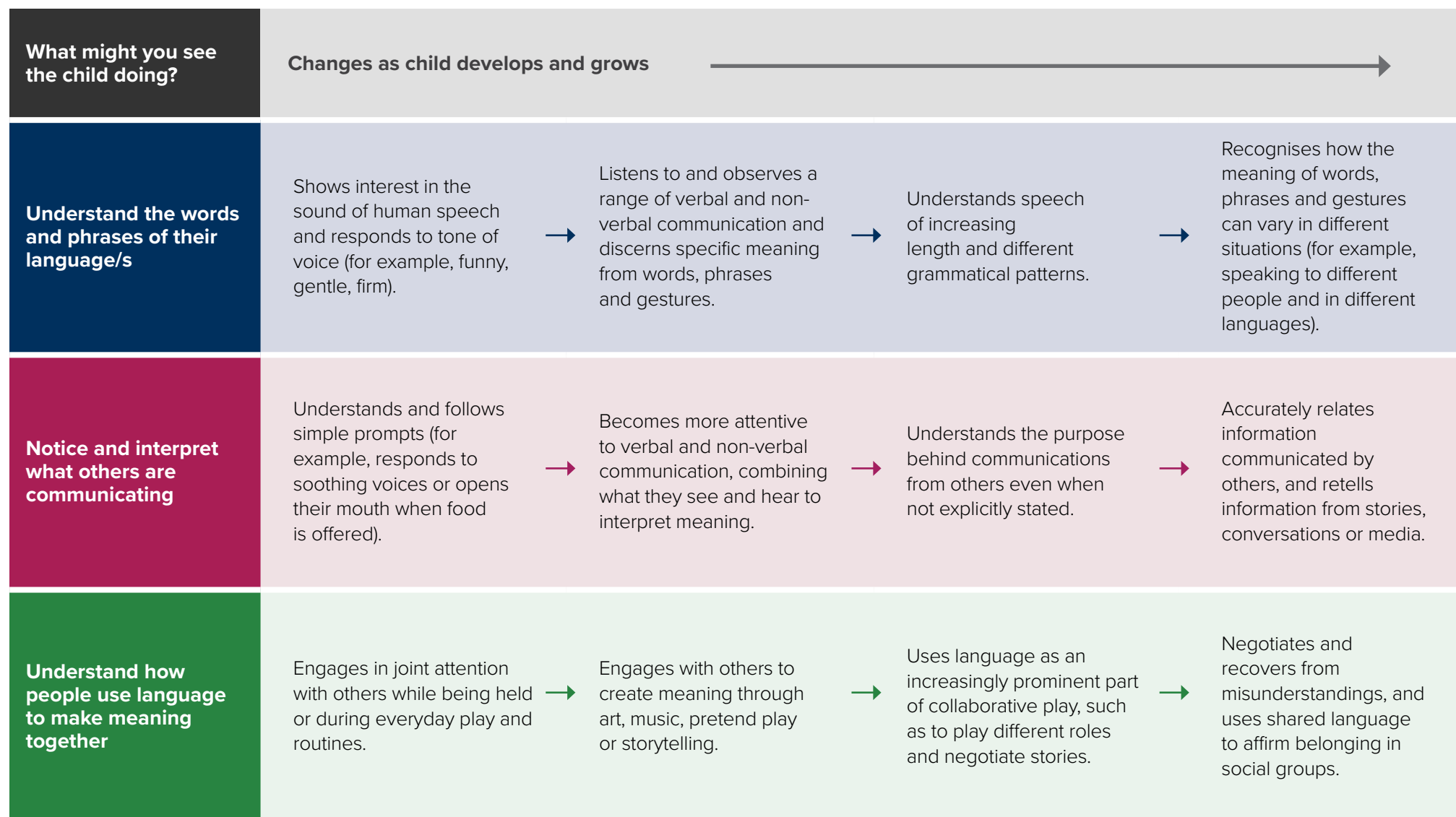
Within each subdomain, there are **3 strands**, describing the capabilities that change over time as children learn and develop.



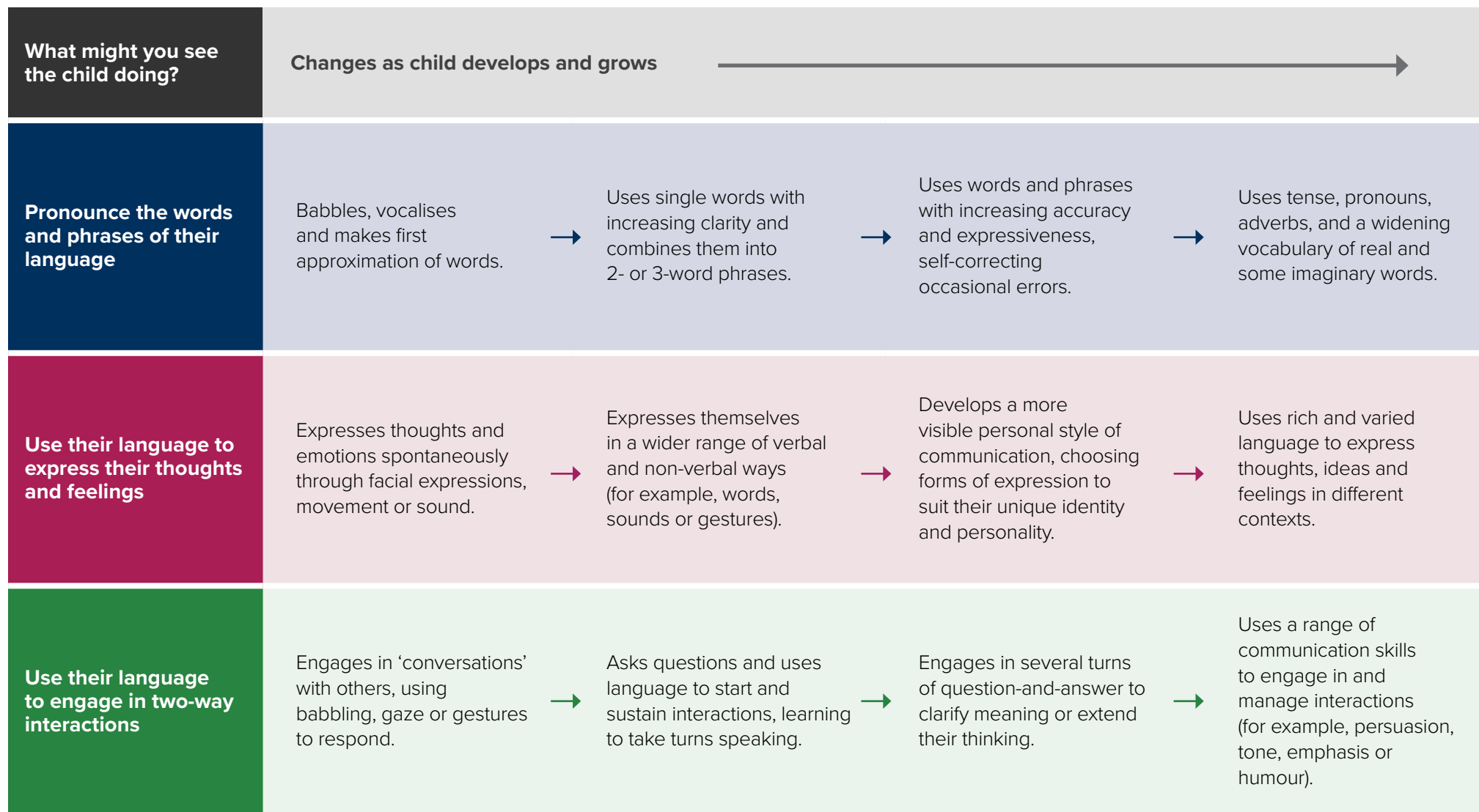
Within each strand, there are **indicators** that describe what you might observe as children progress along the trajectory. These indicators build on one another over time.



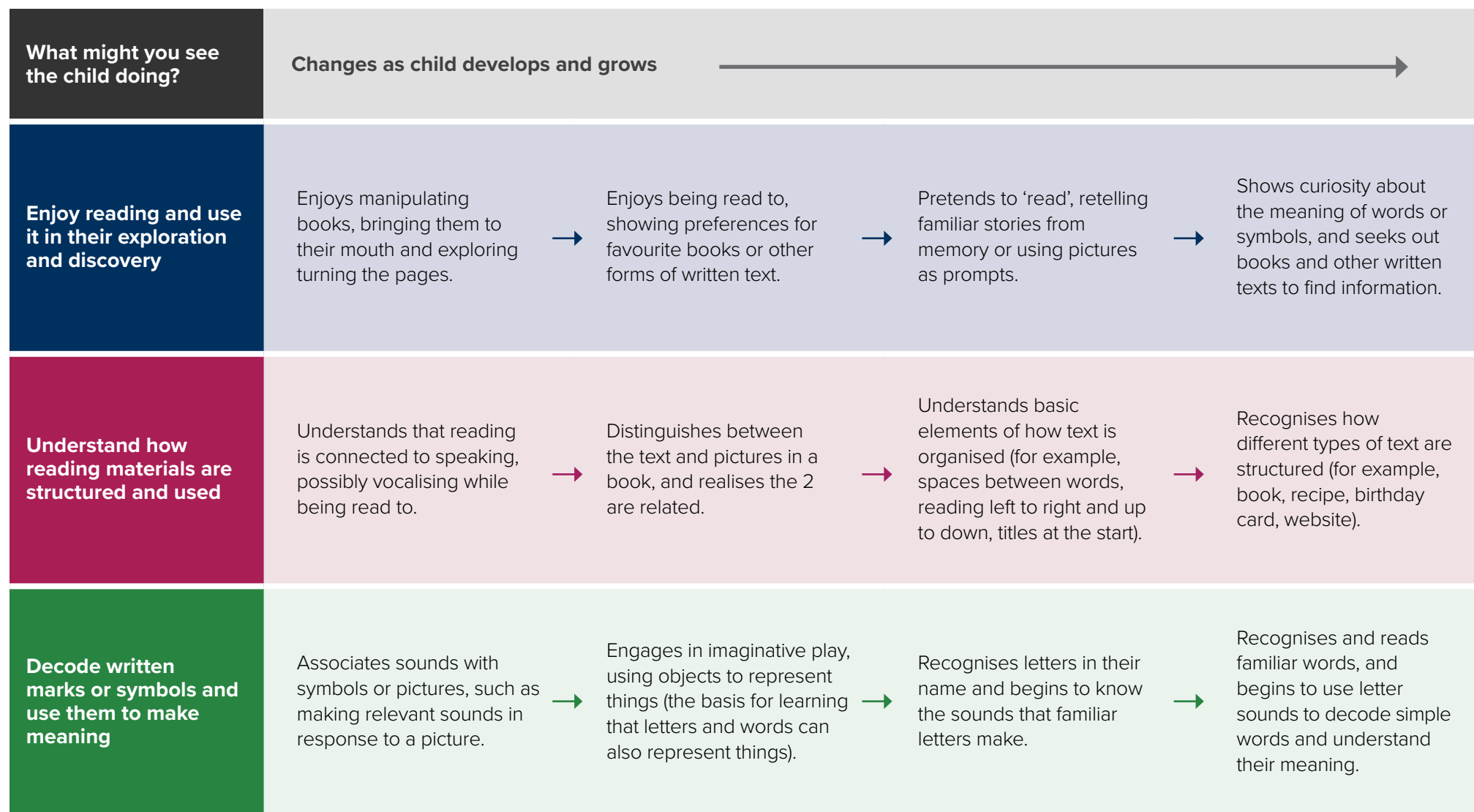
## Receptive language



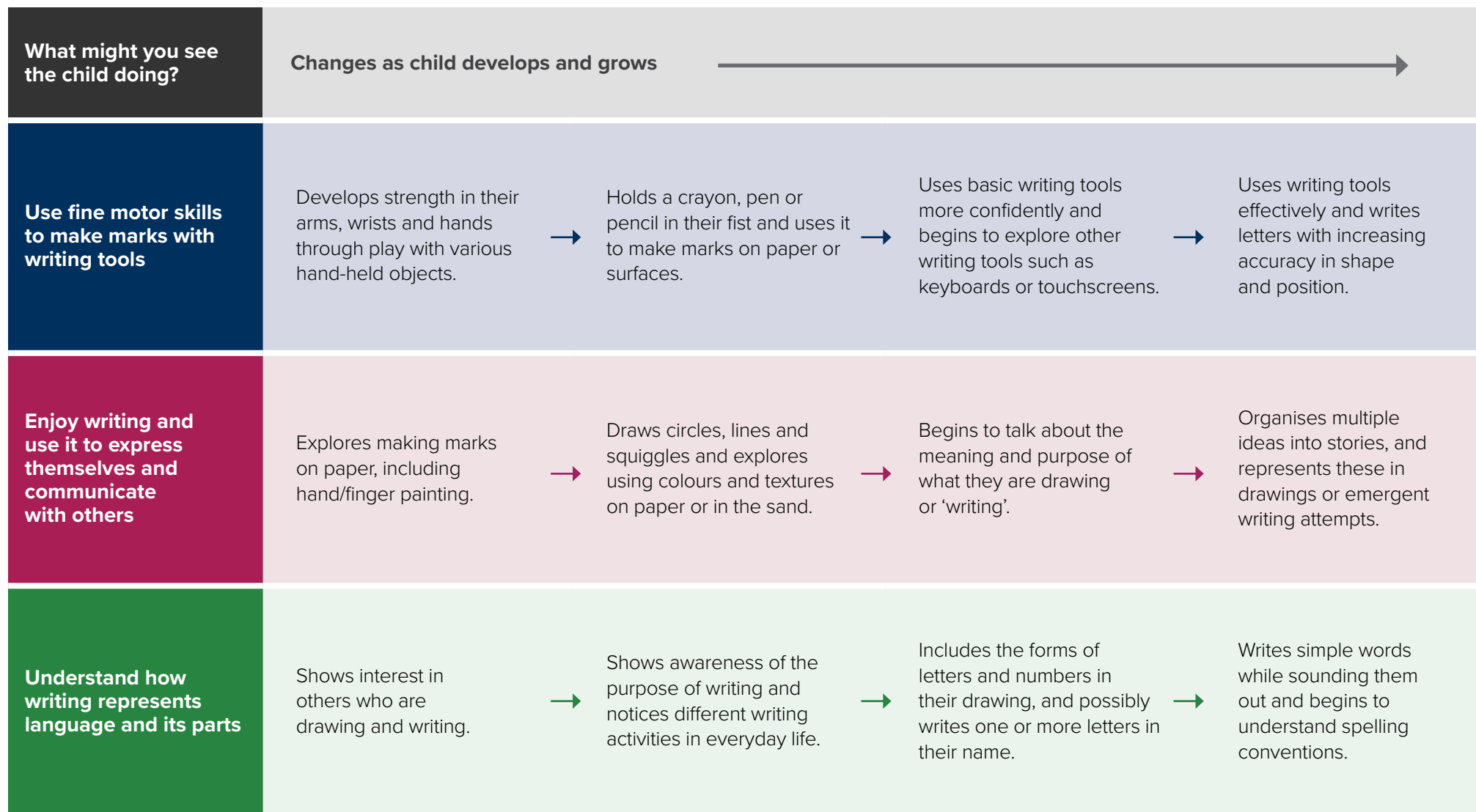
## Expressive language



## Emergent reading



## Emergent writing



## Creating opportunities to support children’s language and communication

### Receptive language

- Vary the words, tones and gestures you use when talking to children to make language interesting at an age-appropriate level.
- Recognise that children may understand more than they can say, especially children from a language background other than English.
- ‘Wonder aloud’ or narrate what you are seeing or doing to help children make connections between words and actions.
- Encourage families to celebrate and extend children’s emerging understanding, using their home language as a foundation for learning.

### Expressive language

- Experiment playfully with sentences, syllables or sounds (for example, in songs or rhymes) to help children recognise the building blocks of speech.
- Use a range of age-appropriate strategies to sustain two-way interactions, such as asking further questions or open-ended questions.
- Repeat, extend and rephrase children’s words and sentences, modelling accurate expression and reinforcing their successful attempts.
- Encourage children to wonder aloud, hypothesise and predict, using any language they have to express and extend their thinking.

### Emergent reading

- Provide literacy-rich environments for all age groups using books – including bilingual books – print, signs and labels to incorporate reading into play and routines.
- Engage in songs, nursery rhymes and finger play and later rhyming games to support phonological awareness.
- Engage children in shared reading activities and talk to children about the meaning of what you have read together.
- When reading, introduce concepts of print such as reading from left to right, or phonological strategies like sounding out letters.

### Emergent writing

- Provide various age-appropriate materials for children to experiment with mark-making, and ask older children what their marks mean.
- Model purposeful writing throughout the program and encourage children to incorporate it into their socio-dramatic play.
- Encourage children’s writing attempts and celebrate their efforts to convey meaning while gradually building accuracy over time.
- Introduce children to diverse symbols and writing scripts that reflect their home languages, cultures and experiences.

## Early childhood learning trajectories

# Physical development

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# Physical development

## What is physical development?

Physical development occurs as children learn how to use and take care of their growing bodies. It is an important domain and a foundation for other learning and development. Children use their bodies for learning, by moving around and interacting with people and their environment. While many physical changes in early childhood happen through maturation, early childhood education and care (ECEC) services can support and extend children's physical development in many different ways. Physical development involves 4 key components:

- Gross motor skills involve using the large muscles of the arms, legs and torso. These skills includes using muscles individually or in whole-body movements such as walking.
- Fine motor skills involve using the small muscles of the hands, wrists, fingers, feet, toes, lips and tongue. These skills enable children to talk, draw, write and play.
- Sensory awareness enables children to perceive, process and react to sensory information such as touch, smell, sound, vision, taste and sense of balance.
- Physical health and self-care involves children gaining independence in meeting their basic physical needs, including for rest, activity, nutrition, safety and hygiene.



Image credit: Stock.com/SolStock

### Early Years Learning Framework

AERO's Early Childhood Learning Trajectories align with the principles, practices and outcomes of the [Early Years Learning Framework V2.0](#). The [introduction](#) provides further information and demonstrates how the Learning Outcomes can be mapped to domains.

### National Quality Standard

[Quality Area 2 – Children's Health and Safety](#)

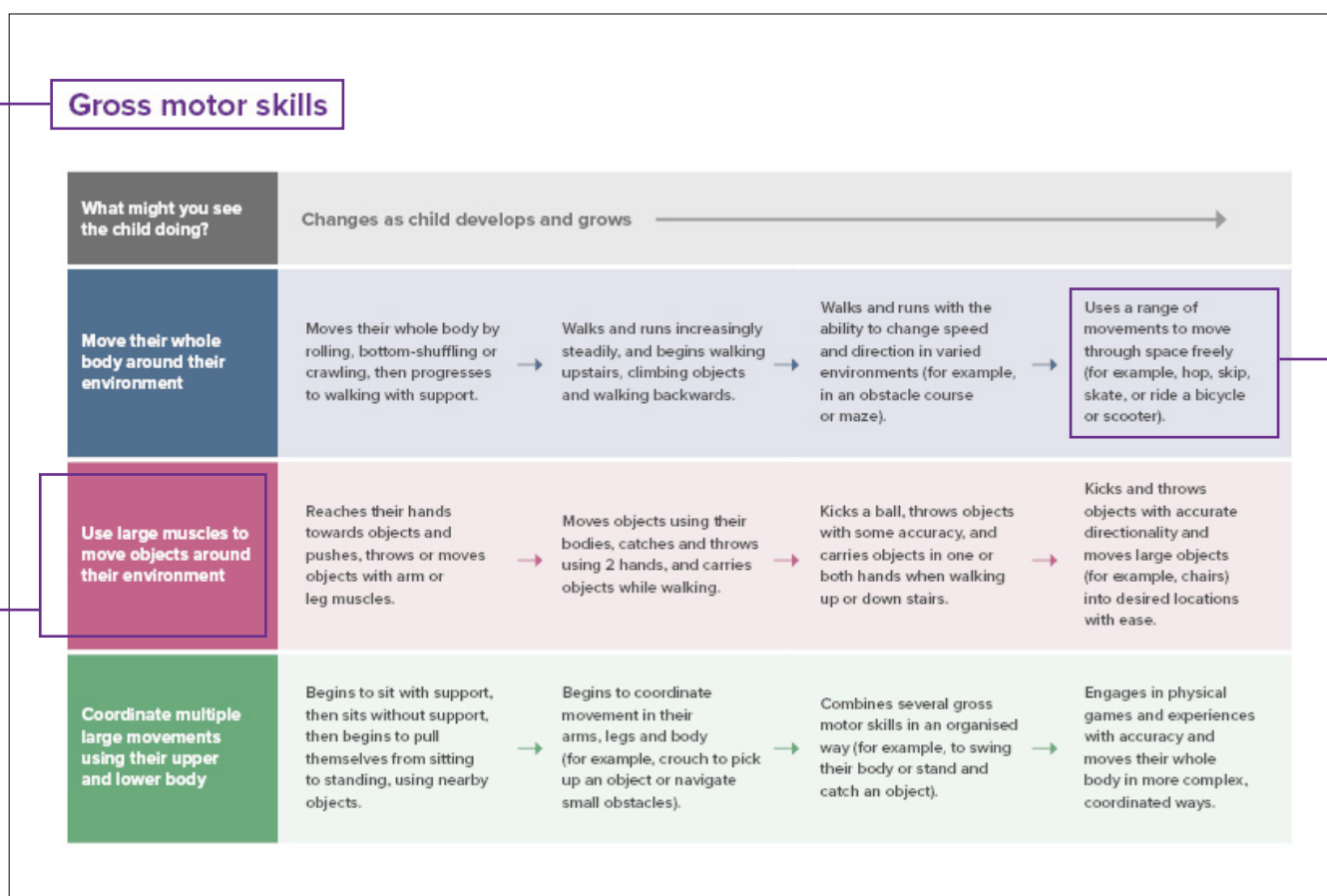
## How to use the physical development learning trajectories

These learning trajectories will help you observe children’s progress in physical development and plan the next steps in their learning and development. They will give you language and ideas for documenting children’s learning and development, and for your conversations with families and colleagues about children’s progress. The trajectory is not a checklist. You are encouraged to use your professional knowledge and judgement in determining how each child may demonstrate progress along each trajectory, and how best to support their learning.

The domain for this set of learning trajectories is physical development.

Within this domain, there are **4 subdomains**: gross motor skills, fine motor skills, sensory awareness, and physical health and self-care. Each subdomain is presented in a separate table.

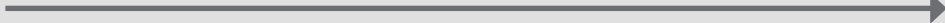









Within each subdomain, there are **3 strands**, describing the capabilities that change over time as children learn and develop.



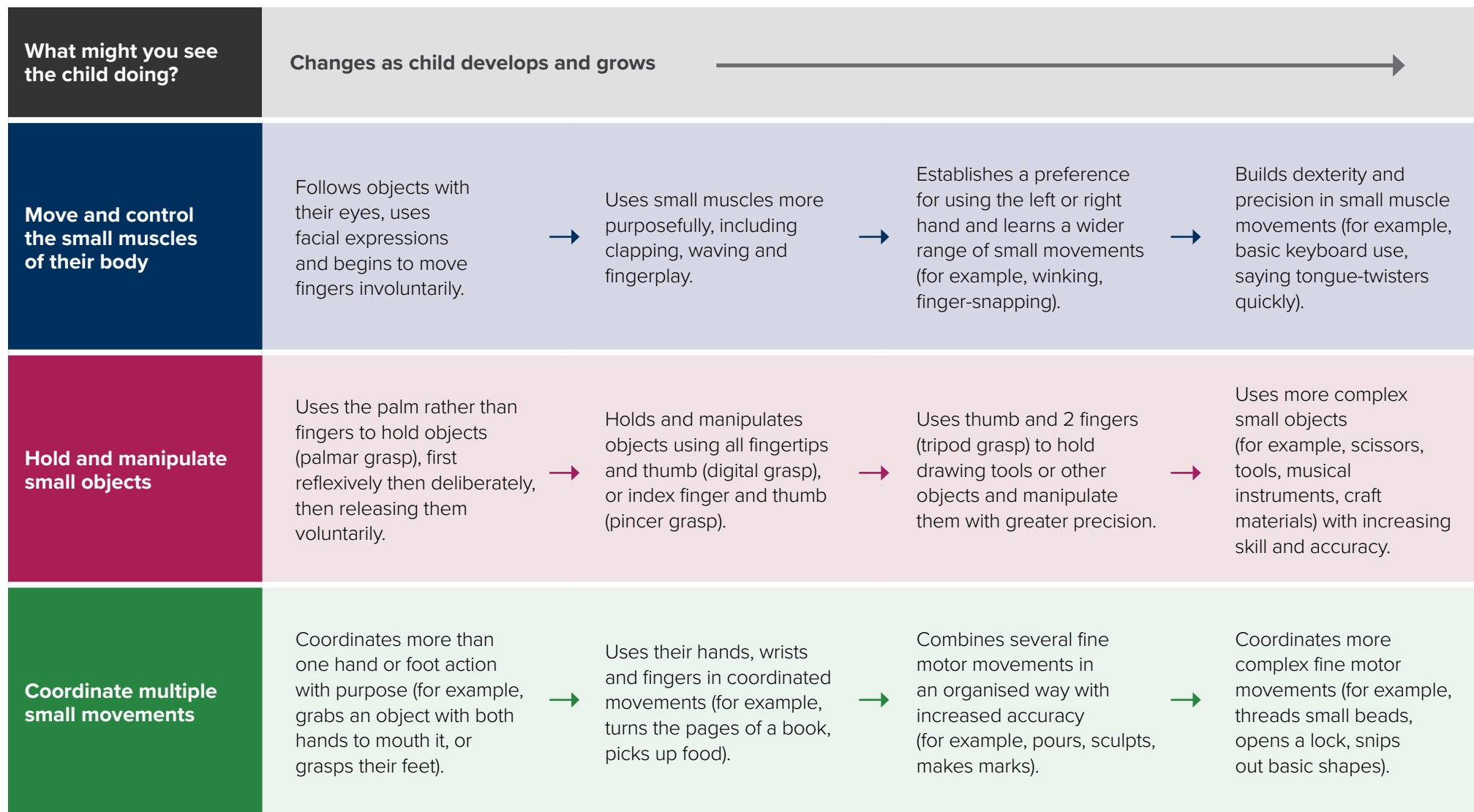
Within each strand, there are **indicators** that describe what you might observe as children progress along the trajectory. These indicators build on one another over time.



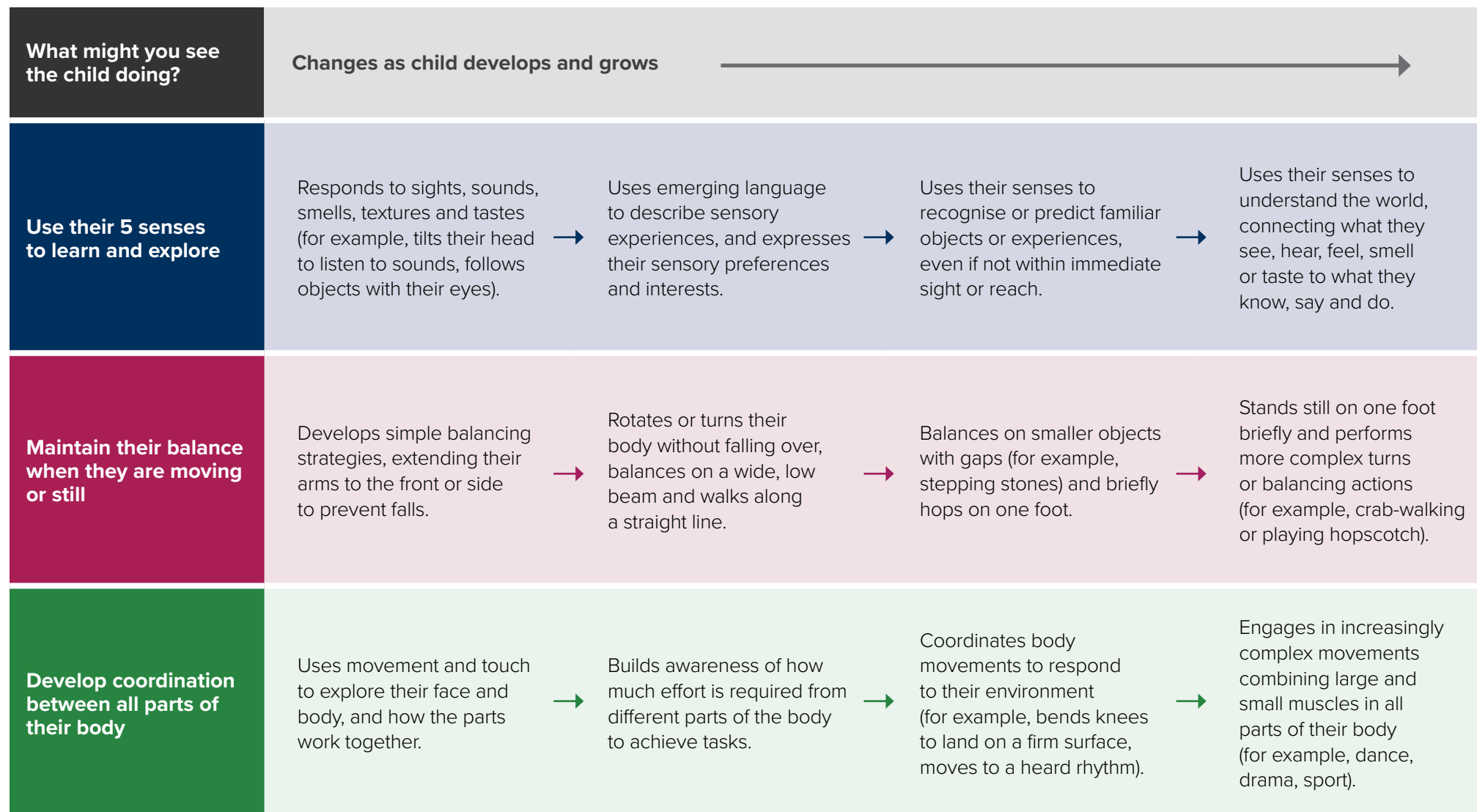
## Gross motor skills

What might you see the child doing?	Changes as child develops and grows 			
<b>Move their whole body around their environment</b>	Moves their whole body by rolling, bottom-shuffling or crawling, then progresses to walking with support.	 Walks and runs increasingly steadily, and begins walking upstairs, climbing objects and walking backwards.	 Walks and runs with the ability to change speed and direction in varied environments (for example, in an obstacle course or maze).	 Uses a range of movements to move through space freely (for example, hop, skip, skate, or ride a bicycle or scooter).
<b>Use large muscles to move objects around their environment</b>	Reaches their hands towards objects and pushes, throws or moves objects with arm or leg muscles.	 Moves objects using their bodies, catches and throws using 2 hands, and carries objects while walking.	 Kicks a ball, throws objects with some accuracy, and carries objects in one or both hands when walking up or down stairs.	 Kicks and throws objects with accurate directionality and moves large objects (for example, chairs) into desired locations with ease.
<b>Coordinate multiple large movements using their upper and lower body</b>	Begins to sit with support, then sits without support, then begins to pull themselves from sitting to standing, using nearby objects.	 Begins to coordinate movement in their arms, legs and body (for example, crouch to pick up an object or navigate small obstacles).	 Combines several gross motor skills in an organised way (for example, to swing their body or stand and catch an object).	 Engages in physical games and experiences with accuracy and moves their whole body in more complex, coordinated ways.

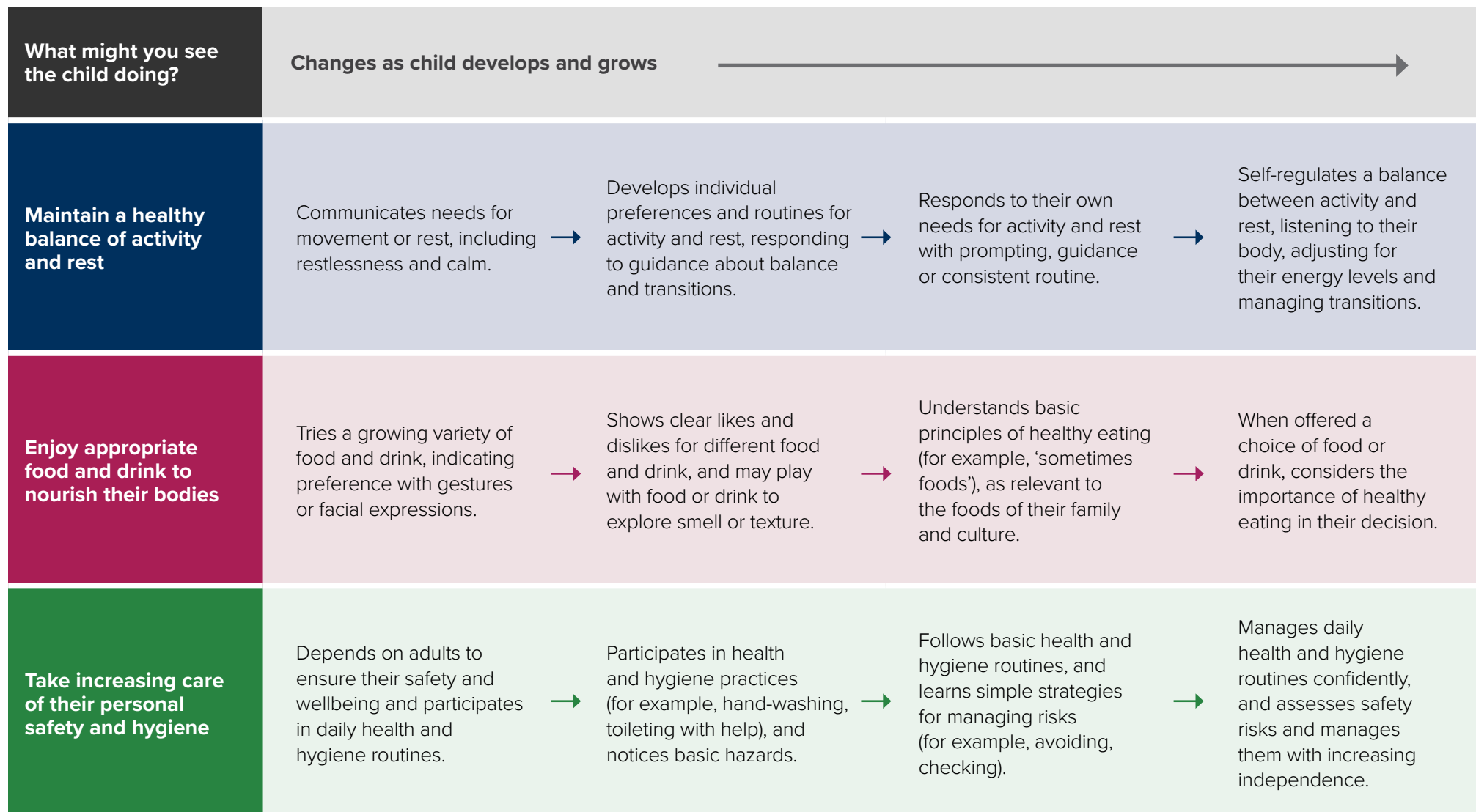
## Fine motor skills



## Sensory awareness



## Physical health and self-care



## Creating opportunities to support children's physical development

### Gross motor skills

- Plan and set up indoor and outdoor spaces to invite age-appropriate physical movement, such as pushing, pulling, climbing and jumping.
- Encourage children to explore different body positions, such as lying on their tummies, touching their toes, standing tall, crouching or bending.
- Incorporate movement into learning experiences, such as stretching, dancing, action songs, balancing, and physical sports and games.
- Notice and celebrate children's efforts to move, from infants stretching for toys to older children inventing new dances or games.

### Fine motor skills

- Incorporate many small movement experiences, including grasping, holding, manipulating, turning, pinching, blowing and threading.
- Foster fine motor skills to support language development, encouraging children to move their mouths while talking, singing or eating.
- Plan experiences that strengthen hand muscles, such as pressing and squeezing play dough or clay, or scrunching or tearing paper.
- Provide a range of small materials, tools and objects to grasp, hold and use that are age-appropriate and provide adequate challenge.

### Sensory awareness

- Provide a wide range of sensory experiences in play and routines, including different textures, colours, sounds, tastes and smells.
- Model a variety of descriptive language to help children become aware of and describe what they see, hear, feel, smell or taste.
- Provide safe opportunities for children to feel unbalanced and recover, such as swings, wobble boards, uneven mats or balancing games.
- Help children become aware of how their body works as a whole, such as hugging themselves to feel their back muscles or doing yoga.

### Physical health and self-care

- Offer sleep, rest and physical activity opportunities appropriate for each individual child, including quiet play areas indoors and outdoors.
- Make mealtimes social and engaging, using positive strategies and modelling to encourage children to try a range of healthy options.
- Involve children in daily health and hygiene routines, narrating actions playfully and including reasons why they are important.
- Provide safe opportunities for children to identify and manage risks with increasing independence appropriate to their development.



## Further reading

For more information on our learning trajectories research, read our research report [Early Childhood Learning Trajectories: The Evidence Base](#).



## More information

The AERO website features [further guidance](#), including practice guides and case studies for early childhood practice. Visit [edresearch.edu.au](http://edresearch.edu.au) for more information.



Image credit: AERO



For more information visit  
[edresearch.edu.au](https://edresearch.edu.au)

