

*These activities will support your teaching practice, understanding and engagement with the maths practices. They support use of the Kōwhiti Whakapae maths practices cards sent in September 2025. There are **four activity examples**, they vary in length from 15 – 60 minutes and include step-by-step guidance on using the cards in different scenarios. We hope that you will use them with your teams and home-based educators for collaborative sense making.*

Maths lay the groundwork cards

Mix and match

This is a whole team activity that takes around 15 minutes, so it is good for a team hui, or as an activity in smaller groups. Visiting teachers may like to do this quick activity during a visit to a home-based educator.

This activity helps you and others become familiar with practices in each of the maths sub-areas of Kōwhiti Whakapae. This familiarisation activity can be revisited over time to keep the learning fresh and to celebrate change and growth in your team.

What you will need for this activity:

- › The maths lay the groundwork practice cards
- › 4 pieces of plain A3 size paper
- › Pens

Activity guidance:

Step 1:

- › On the first piece of paper write 'Space & Measurement'
- › On the second write 'Number & Measurement'
- › On the third write 'Pattern & Relationships'
- › On the fourth write 'Create & Communicate Maths.'

Step 2: Place the four pieces of paper around the room. The facilitator introduces each sub-area by reading the overall description from the maths sub-area introduction cards. (This is the green text found on each introduction card).

Note: You may also like to write the sub-areas and their descriptions on a piece of paper or whiteboard so people can refer to them when needed.

Step 3: Shuffle all the practice cards so that the cards are mixed up. The facilitator reads the 'what' section of one of the practice cards aloud to the team. (This is the black text found under the green lay the groundwork practices box).

Step 4: As a team, match each practice with the corresponding maths sub-area. Team members write each practice on the sub-area piece of paper that they feel it best fits in. Encourage kaiako to explain why the practice belongs in that sub-area, thinking beyond the obvious.

Step 5: Repeat this process until the team have worked through all the lay the groundwork practice cards.

Step 6: Get the team to check if they have managed to match the correct practices to their corresponding sub-area. (Some will be less obvious than others).

As a team, check:

- › how many you got correct?
- › which practices do you need to spend more time exploring?
- › did anything surprise you?

Facilitator notes:

- › This exercise is about understanding what is known already about the maths sub-areas. While kaiako may easily place the practice card in the corresponding sub-area, the real provocation lies in their understanding of 'why' they placed the card there and their understanding of the practice.
- › To encourage deeper thinking, invite kaiako to share examples from their practice that support learning in the maths sub-areas.
- › It is important to give all kaiako an opportunity to contribute their knowledge and understanding.
- › You may consider tuakana-teina pairs to support new and emerging kaiako.
- › Fun games and repetition support understanding and sustained practice. If you repeat this game over time you may like to invite different kaiako to take turns facilitating so that the leader is also able to be a participant in the game.

Maths lay the groundwork cards

Getting familiar with Kōwhiti Whakapae maths practices

This activity helps you and those you work with to become familiar with the practices in each maths sub-area, and to unpack the practices together.

This is a shared activity that could take around 60 minutes. You could complete this activity over several team hui or over planned visits to home-based educators.

What you will need for this activity:

- › The maths lay the groundwork practice cards
- › 3 pieces of plain A3 size paper
- › A pen and piece of paper to document any decision making.

Activity guidance:

Step 1: Gather three pieces of plain A3 size paper.

- › On the first piece of paper write 'practices we are curious about'
- › On the second piece of paper write 'practices we are already familiar with'
- › On the third piece of paper write 'practices we need to strengthen'

Step 2: Place the three pieces of paper around the room. One person reads one of the practice cards to the group.

Step 3: Give some time to individually consider the practice that has just been read. As a leader, create space for kaiako to ask questions about practices they are unsure of. Check that there is a shared understanding of the practices across the group.

Once everyone is ready, discuss which category you want to place this practice in—in the 'practices we are curious about,' or the 'practices we are already familiar with,' or 'practices we need to strengthen' category.

Once you have reached a shared decision, then place that practice in the category you have chosen.

Step 4: Repeat this process until you have worked through all the practice cards. Remember you can return to this activity over several team hui or visits if you don't manage to get through all the cards. Take your time to reflect together, discuss and come to a shared decision about where best to place each practice.

Step 5: Document your shared decision making. Perhaps take a photo of the three pieces of paper to capture where each practice was placed and return to this in future.

Step 6: Reflect on what this activity has told you.

- › Are there more practices from a particular maths sub-area in one of the categories?
- › How can this activity help you make an informed decision about which maths sub-area to focus on first?

Step 7: When you are ready, choose one maths sub-area to focus on until you are familiar with Kōwhiri Whakapae – keep it manageable.

Facilitator notes:

- › This activity can be adapted to suit your context. Visiting teachers working with home-based educators might choose to implement this activity over several visits or come together and do this activity collaboratively during a planned professional learning day.
- › Start by supporting your educator to place practices in one of the three categories ('practices we are curious about', 'practices we are already familiar with' and 'practices we need to strengthen').
- › On your next visit you can come back to this work or discuss and document why each practice was placed in a particular category.
- › On the third visit you may like to reflect together on what the activity has told you (e.g. are there more practices from a particular sub-area in one of the categories?). Think about how this information could help you make an informed decision about which sub-area to focus on first.
- › Visiting teachers may consider strategies and available resources or tools to support their educators as they learn more about their chosen sub-area.
- › You may also choose to hold a professional development event and complete this activity as a wider network group.
- › Create an inviting atmosphere where kaiako can easily see and hear each other. Invite all kaiako to contribute to the activity.
- › Ask prompting questions to facilitate discussion and keep the conversation going. For example:
 - › Why are we curious about this practice?
 - › Are we already implementing this practice in our setting?
 - › How well are we currently doing this?
- › If you have kaiako who are absent from the activity, think about how you might capture the conversation for them. Perhaps you allocate a minute keeper, or, with the permission of all attendees, you could record the hui to share with those who were absent later.
- › Consider displaying the documentation in the staff room or office so kaiako can continue their thinking and add reflections.
- › What you learn from this activity can help form part of your setting's internal evaluation process.

Maths lay the groundwork cards

Refining practices in your setting

This activity takes around 40 - 50 minutes to complete, and it will support you and your team to consider and reflect on how you might refine and build on the maths practices, so they are meaningful to your setting.

This activity is designed to be used once you have chosen a few lay the groundwork practices from one sub-area to focus on. We recommend that you choose a maximum of three practices to make this activity manageable for your team.

We encourage you to first complete the activity 'Maths lay the groundwork cards: Getting familiar with Kōwhiti Whakapae maths practices'. This will support your team as you choose one sub area to focus on to begin with.

What you will need for this activity:

- › The maths lay the groundwork practice cards
- › 4 x A3 pieces of plain paper
- › Pens

Activity guidance:

Step 1: Gather four pieces of plain A3 size paper.

- › On the first piece of paper write 'How can we build on the practice, so it is meaningful to the identity, language and culture of the children in our setting?'
- › On the second piece of paper write 'How can we enact the practice, so that it is consistent with our service's philosophy?'
- › On the third piece of paper write 'How might we adjust our interactions, routines, equipment, the use of space or organisation of staff as we enact this practice in our setting?'
- › Keep the fourth piece of paper free till the end to document decisions.

Step 2: Divide team members into group sizes that work best for your context. Give each group one of the pieces of A3 paper. Select a maximum of three practice cards from the sub-area you are focusing on and place them where all groups can see them.

Step 3: Invite each group to spend up to 25-30 minutes discussing each of the three practices in relation to the question on their piece of paper. Invite one person in each group to record the key ideas discussed on the piece of paper.

Step 4: All groups come together to share the ideas they have documented—for larger groups you may want to allocate someone to share on behalf of the group.

Step 5: As a team, use the information shared to come to a collective decision about how you are going to refine and build on your chosen practices to be meaningful for your setting. Remember to document these decisions using the fourth piece of paper.

Step 6: Now put these ideas into practice.

Remember: you might spend an extended period of time embedding a few practices at a time. Don't worry—it is important to take your time at this step.

Facilitator notes:

- › Depending on the size of your team you may find it useful to have your whole team work through all three questions in relation to one practice at a time.
- › Home-based networks may decide to complete this activity with a group of visiting teachers to support goal setting and planning with educators.
- › Consider how you might capture and document the important work that's taken place during this exercise. You could take a photo of each of the pieces of paper as evidence of this activity and to revisit in the future. You could also display the photos or pieces of paper in the staff room as a visual reminder of what was discussed.
- › Over time, and once you have been using the practices in your setting for a while, you could revisit this activity to help you review their effectiveness and make further adjustments where needed.
- › What you learn from this activity can help form part of your setting's internal evaluation process.

Maths lay the groundwork cards

Building capability

This activity is designed to build the teams collective professional capability. It is a whole team activity and takes around 30-40 minutes, so is good to use during team hui or when working with groups of home-based educators.

To get the most out of this activity, let all kaiako know ahead of time that this activity is something you would like to do with the team to support professional growth. Give kaiako the opportunity to read the practice cards ahead of time to build familiarity before the activity.

What you will need for this activity:

- › The set of maths lay the groundwork practice cards
- › A pen and piece of paper.

Activity guidance:

Step 1: Leaders and kaiako work together to sequence the practice cards on a continuum. Place each practice from left to right in order of confidence. The practice the team feels most confident about is placed at the far left of the continuum, then continue to place the remaining practices in order of decreasing confidence. Allow time to adjust the placement of cards as each practice is reviewed.

Step 2: To understand more about why the team has placed each practice in the position they have on the continuum. Talk about:

- › what is known about each practice
- › what each practice looks like in action in your setting
- › any challenges about the practice.

During the discussion, the team may decide to shift the order they have placed some practices in.

Step 3: In collaboration, team members share their insights and reflections from this exercise. For some this may lead to forming a learning goal.

As a team, consider:

- › practices the team were confident with
- › practices the team were less confident with.

Step 4: Remember to document the learnings and any actions from this exercise.

Facilitator notes:

- › This exercise encourages leaders and kaiako to collectively reflect on the practices and their current understanding of and confidence with them.
- › This activity could also be done in smaller teams or room groups if your service is larger.
- › Remember you may not start and finish this activity in one go, you can always continue the conversation over several meetings or visits.
- › Consider how you might capture and document the important work that's taken place during this activity.



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