

Planning opportunities to notice

This activity supports teachers to consider the relationship between their planned programme and the framework. It also supports teachers to identify activities/problems that provide rich opportunities to notice how students are achieving in relation to the framework.

The resources referred to in this activity can be found in the resources column at <https://curriculumprogresstools.education.govt.nz/lpfs/understanding-the-mathematics-framework/>.

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| **1.** | **Consider an upcoming unit of work** |
| Think about an upcoming mathematics unit of work or a cross-curriculum unit that includes mathematics.  |
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| **What strand/s and AOs?** |  | **Record your response** |
| Which strand/s and AOs does the unit of work address? |  |  |
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| **What learning activities?** |  | **Record your response** |
| List the mathematics learning activities that your learners will experience in the unit.  |  |  |

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| **2.** | **Turning to the mathematics framework** |
| You have identified the strands and AOs from the curriculum that are the focus of this unit and listed the planned teaching and learning activities. Identify the aspect(s) that are the best match for your unit of work. Read the big ideas that underpin each signpost and identify the signposts that reflect the concepts, skills or strategies included in your unit. You can find the big ideas in the mathematics framework by clicking on the above the illustrations for each signpost. Alternatively, a full list of the big ideas is available in the more info paper *The big ideas of the mathematics framework.*  |
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| **What do you need to know more about …**  |  | **Record your responses** |
| Which aspect(s) and which signposts does your unit of work address?  |  |  |

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| **3.** | **Reflect on the illustrations in the identified signposts** |
| Each illustration within a set is designed to describe a different element of student expertise, so no parallel problems or tasks are included. This ensures that the minimum numbers of illustrations are used to describe expertise and increases manageability for teachers. It also ensures that a comprehensive view of student expertise is provided. For example, in the geometric thinking signposts, illustrations address shape, location and transformation. Look at the illustrations included in the signposts that you identified in (2). Do the teaching and learning activities included in your unit of work cover similar concepts, knowledge and skills? |
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| **What to do …**  |  | **Record your answers** |
| Do your activities cover the breadth of the understandings shown in the range of illustrations at the signposts?If not, what is missing?Do your activities address understandings not illustrated within the signposts? If yes, what are they? |  |  |

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| **4.** | **Identify the activities that provide rich opportunities to notice** |
| Your unit of work is likely to include a variety of activities that cater for the varied interests and capabilities of your students. Some are likely to be “richer” than others in providing opportunities for you to notice your students’ current level of expertise. Remember that you are looking to notice how students apply their knowledge and skills to solve problems and model situations independently. If you are planning to enter aspect judgments into PaCT at the end of the unit then use what you have noticed to directly inform those judgments.  |
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| **What to do …**  |  | **Record your answers** |
| List the activities or problems that provide rich opportunities to notice the expertise of your students as they work independently.  |  |  |