Year 1 Assessment
Numeracy Checkpoints – June

Post office
Using spatial reasoning
Using measurement
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Purpose

The assessments within the checkpoints have been designed to be implemented within everyday classroom practice. They provide opportunities for children to demonstrate the targeted indicators within learning areas.

Assessment of young children is an integral part of the learning–teaching process and is not a separate activity.

Assessment involves the purposeful, systematic and ongoing monitoring of children’s learning. The information gathered is used for future planning and to make judgments about a child’s learning.

June assessment focus

June is the second monitoring point in the Year 1 Assessment: Literacy and Numeracy Checkpoints.

There are four numeracy assessments for June. This assessment and the indicators it targets are indicated in bold text in the table below.

<table>
<thead>
<tr>
<th>June assessments</th>
<th>Targeted numeracy indicators</th>
</tr>
</thead>
</table>
| **Post office** — Calculating and estimating (CE) Using fractions, decimals, percentages, ratios and rates (FDPR) | CE 1 iii  
CE 1 iv  
CE 1 vi  
CE 1vii  
CE1 x  
FDPR 1 i |
| **Post office** — Using measurement (M) Using spatial reasoning (SR) | SR 1 ii  
M 1 i  
M 1 iii  
M 1 iv |
| **Round the ridges** — Using spatial reasoning (SR) | SR 1 i |
| **Patterns in songs and games** — Recognising and using patterns and relationships (PR) | PR 1 i |

Before implementing

Suggested times

<table>
<thead>
<tr>
<th>Section</th>
<th>Suggested times</th>
</tr>
</thead>
<tbody>
<tr>
<td>1–3</td>
<td>13 minutes — children working independently</td>
</tr>
<tr>
<td>4</td>
<td>5 minutes — children working independently within small groups</td>
</tr>
</tbody>
</table>
Suggested teaching and learning

Children need multiple opportunities to engage with all aspects of the indicators before this assessment.

Suggested teaching and learning before implementing

- Visit the local post office to post a letter.
- Set up a class post office. Ask the children to use “mind pictures” to:
  - estimate how many parcels will fill display spaces
  - arrange letterboxes into a given space.
- Explore the function and operations of a post office.

The post office — resources

- The Australia Post education website <http://auspost.com.au/education/index.html> activates children’s prior knowledge and provides background experiences, such as:
  - buying stamps
  - posting letters
  - sorting mail according to house numbers
  - bundling letters.
- Teacher and children create a class post office. Children collaboratively explore and develop measurement concepts while engaging in real-life, purposeful play.

<table>
<thead>
<tr>
<th>Target numeracy indicator</th>
<th>Suggested teaching and learning</th>
</tr>
</thead>
</table>
| **SR 1 ii**               | **Teachers:**
| Use positional language to describe: |
| the position of an object in two different ways |
| two different pathways to get to a familiar location |
| Teachers: |
| describe the position and location of a place to which letters are to be delivered within the school and two pathways to get to it |
| model following pathways to and from familiar locations within the school, e.g. Monday: moving from the classroom down the stairs to the library and returning to the classroom a different way; Tuesday: moving from the classroom to the library going past the tuckshop and returning to the classroom |
| explore position and directions using GPS |
Catering for diversity

Inclusive strategies enable a learner with disabilities to participate in learning experiences on the same basis as a learner without disabilities. This is achieved by making adjustments to the delivery or mode of assessment, without changing the way the assessment is judged or marked.

A teacher makes required adjustments to teaching, learning and assessment to enable a student with disabilities to demonstrate knowledge, skills or competencies (Disability Discrimination Act 1992 and Disability Standards for Education 2005 Cwlth).

Specific adjustments in Post office — Using spatial reasoning and Using measurement may include:

- opportunities to explore and play with materials before the assessment
- altered resources, e.g. larger, more visual
- repeated opportunities to respond.

Teacher preparation

This assessment should be completed by the end of June, although some children may be ready to be assessed earlier than June.

Familiarise yourself with the assessment by:

- reading the entire document
- noting the highlighted aspect of each indicator that is the focus of the assessment
- noting the specific evidence that you will be looking for within each section.
Plan for implementation by preparing the necessary resources and considering the following questions:

- How will I implement this assessment within my regular teaching program?
- What additional support will I require?

**Resources**

Teachers will need the following resources when implementing this assessment:

<table>
<thead>
<tr>
<th>Section</th>
<th>Resources</th>
</tr>
</thead>
</table>
| 1–5 (inclusive) | • the implementation plan to follow when undertaking the assessment  
• A3 copy of “Appendix A: Numeracy class checklist — Year 1” to record each child’s responses |
| 1 | • envelopes in at least three significantly different sizes |
| 2 | • boxes of at least three significantly different masses, but with manageable mass for hefting  
• set of objects with the same attributes to fill the boxes |
| 3 | • set of objects with the same attributes to fill the boxes  
*Note: the chosen object selected for part 3 should be of a size that allows the child to make a reasonable estimate. Provide the child with sufficient chosen objects to check their thinking.* |
| 4 | • one envelope with the name of the previous day printed across the stamp, i.e. if you are implementing the activity on a Thursday, write “Wednesday” on the envelope  
• clock hung in the post office, or a clock stamp |
| 5 | • resources to track pathways, e.g. an electronic device such as a Global Positioning System (GPS). |
Implementing

Record all evidence on the checklist provided as Appendix A.

### Section 1. Giving directions and describing pathways

<table>
<thead>
<tr>
<th>SR 1 ii</th>
<th>Suggested implementation</th>
<th>Source of evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Use positional language to describe:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• the position of an object in two different ways</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• two different pathways to get to a familiar location</td>
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<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Suggested implementation</th>
<th>Source of evidence</th>
</tr>
</thead>
</table>
| Explain to the children that they will be delivering mail to a familiar location within the school, e.g. tuckshop. **Say:** “There is mail to be delivered to/collected from (familiar location in the school, e.g. tuckshop). Can you use position words to tell me the way to get there from our classroom? It will be easy for me if you can think of some special shapes or objects I can look for along the way”. **Note:** The child may refer to objects such as “around the big tree”, “near the gate”. **Say:** “Can you tell me how to get from (the familiar location) back to our classroom using a different pathway? Can you think of some special shapes or objects I can look for along the way?” **Note:** The child could record directions electronically or on a voice recorder for others to follow. **Suggestion:** If the child is not describing position and location, record what they do say as a starting point for future teaching and learning. | Children:  
• give oral directions to get from the classroom to the suggested location using shapes/objects along the way as a guide  
• describe a second set of oral directions to return to the classroom using a different route |

<table>
<thead>
<tr>
<th>Resource</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• resources to track pathways, e.g. electronic devices</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Suggested time</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5 minutes</td>
<td></td>
</tr>
</tbody>
</table>
### Section 2. Measuring

<table>
<thead>
<tr>
<th>M 1 i</th>
<th>Suggested implementation</th>
<th>Source of evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure and compare, with and without the use of digital technologies:</td>
<td>Place three different-sized envelopes in front of the child. <strong>Ask the child to</strong> select three envelopes and use multiple uniform informal units to measure each envelope. <strong>Suggestion:</strong> If the child is not using the terms described in the assessment, record the language they do use and their actions to compare the attributes as a starting point for future teaching and learning.</td>
<td><strong>Children:</strong>&lt;br&gt;• identify the length of each envelope using multiples of uniform informal units&lt;br&gt;• compare the two measurements and use comparative language of longer or shorter to describe the difference</td>
</tr>
<tr>
<td>• lengths, using multiple repeats of uniform informal units and attending to gaps and overlaps</td>
<td><strong>Resource</strong>&lt;br&gt;• three envelopes of significantly different sizes</td>
<td></td>
</tr>
<tr>
<td>• capacities of pairs of objects, using uniform informal units</td>
<td><strong>Suggested time</strong>&lt;br&gt;4 minutes</td>
<td></td>
</tr>
</tbody>
</table>
### Section 3. Comparing attributes

**M 1 i**

<table>
<thead>
<tr>
<th>Measure and compare, with and without the use of digital technologies:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• lengths, using multiple repeats of uniform informal units and attending to gaps and overlaps</td>
</tr>
<tr>
<td>• capacities of pairs of objects, using uniform informal units</td>
</tr>
</tbody>
</table>

#### Suggested implementation

Place three boxes side by side.

**Ask the child to:**

1. measure the boxes using uniform informal units
2. compare the measurements of all three parcels
3. work out which box holds more
4. describe what they have found out.

**Prompts:**

• “You could compare two parcels at a time until you see which is longer/shorter”.
• You could compare two boxes at a time to work out which holds more”.

**Suggestion:** If the child is not using the terms described in the assessment, record the language they do use and their actions to compare the attributes as a starting point for future teaching and learning.

#### Source of evidence

**Children:**

- measure using uniform informal units
  - attend to gaps and overlaps for accuracy in measuring length
  - attend to spillage/overfilling in measuring capacity
- use comparative language when comparing measurements of boxes, e.g. they are longer/shorter, they hold more/hold less

**Resource**

- three boxes of significantly different sizes

**Suggested time**

4 minutes
### Section 4. Time

#### M 1 iii

**Identify hour and half-hour times**

<table>
<thead>
<tr>
<th>Suggested implementation</th>
<th>Source of evidence</th>
</tr>
</thead>
</table>
| Show the child an envelope with a clock stamped near the stamp. Use letters with hour and half-hour times stamped on them. | Children:  
• identify hour and half-hour times |
| **Ask the child:**  
• to record the time of posting that letter or parcel  
• or  
• to show you the matching time of posting on the class clock. | Resources  
• envelopes with hour and half-hour clock times stamped on them  
• class clock or clock stamp. |
| **Prompt:** If the child does not give a verbal response, prompt them to show hour and half-hour times on the play analogue clock. **Suggestion:** If the child is not responding to the questions in this context ask them a series of questions about times of personal significance to determine what they know about hours and half-hours in time. |

#### M 1 iv

**Describe durations using months, weeks, days and hours**

<table>
<thead>
<tr>
<th>Suggested implementation</th>
<th>Source of evidence</th>
</tr>
</thead>
</table>
| Say:  
1. “Wednesday is the day this letter was posted. It will be delivered to Olivia on Friday.”   
2. “Work out how many days it took to get there”.   
3. “The letter was posted at 9 o’clock and delivered at 12 o’clock on the same day”.   
4. “Work out how many hours it took to get there”. | Children:  
• count the durations in days and hours |
| **Prompt:** Continue to ask the questions if you need more clarification of the child’s understanding, e.g. “the parcel was posted at 1 o’clock and was delivered at 4 o’clock. **Note:** Ensure that the times selected are within the morning or the afternoon. | Suggested time  
5 minutes |
Making judgments

Teachers make judgments by matching evidence in each child’s response to the indicators being assessed. The indicator is either demonstrated or not demonstrated.

Teachers record judgments using Appendix A: Numeracy class checklist — Year 1.

An annotated work sample of a child’s achievement of the targeted indicators is available on the QSA website <www.qsa.qld.edu.au/11740.html>.

Teachers tick the indicator on the Data analysis assessment record (DAAR) only when the targeted indicator has been achieved.

Using data to inform future directions

Teachers use the class data recorded on the DAAR and individual children’s profiles to inform future directions for teaching and learning.

When using the DAAR, teachers identify indicators that need further teaching for:

- the whole class
- small groups of children
- individual children.

The Future Directions resource (available on the QSA website at <www.qsa.qld.edu.au/11740.html>) provides suggested additional teaching and learning to develop children’s understanding of the targeted indicators.

Children who have not achieved the highlighted aspects of the targeted indicators in the June assessments should be given opportunities to be explicitly taught the indicators not yet achieved. Children who have achieved the expectations of the targeted indicators in the June assessments should be given opportunities to extend and strengthen their learning by engaging with the indicators at the next level.
Appendix A: Numeracy class checklist — Year 1

<table>
<thead>
<tr>
<th>Names: (write initials)</th>
</tr>
</thead>
</table>

**Section 1. Giving directions and describing pathways**

**SR 1 ii** Use positional language to describe:
- the position of an object in two different ways
- two different pathways to get to a familiar location

Gives directions to get from the classroom to the suggested location using objects along the way as a guide

Provides a second set of directions describing the return to the classroom using a different route

**Section 2. Measuring**

**M 1 i** Measure and compare, with and without the use of digital technologies:
- lengths, using multiple repeats of uniform informal units and attending to gaps and overlaps
- capacities of pairs of objects, using uniform informal units

Identifies the length of each envelope using multiples of uniform informal units

Compares the two measurements and uses comparative language of longer or shorter to describe the difference
### Section 3. Comparing attributes

**M 1 i** Measure and compare, with and without the use of digital technologies:
- lengths, using multiple repeats of uniform informal units and attending to gaps and overlaps
- capacities of pairs of objects, using uniform informal units

Measures using uniform informal units and attends to gaps and overlaps for accuracy in measuring length and attends to spillage/overflow in measuring capacity

Uses comparative language when comparing measurements of boxes, e.g. they are longer/shorter, they hold more/hold less

### Section 4. Time

**M 1 iii** Identify hour and half-hour times

Identifies hour and half-hour times

**M 1 iv** Describe durations using months, weeks, days and hours

Counts the durations in days and hours