Science in the early years

Monitoring science understandings: Checklists for EYLF outcomes

This resource consists of templates of checklists for early years educators, tailored to EYLF learning outcomes. They are to help record evidence of children’s science learning and to monitor this across time.

The checklists have been populated with the EYLF outcomes identified for the four educator resources accompanying Papers 1 and 2.

Paper 1: Early years science and integration:
- Plant treasure hunt
- Floating and sinking

Paper 2: Science inquiry skills:
- Light and shadows
- Exploring mixtures

By using these activities with children over the course of the year, there are multiple opportunities to monitor their developing science understanding and inquiry skills. Observing and monitoring growth in learning can be enhanced by including additional activities that target these or other science outcomes.

The templates are provided in Word format so they can be readily expanded and customised to suit other activities designed by educators to address EYLF science-related outcomes. Add rows or columns to suit the activities selected.

If designing your own activities, identify the outcomes targeted are identified (as illustrated in the activities for Papers 1 and 2), and as recorded in planning documents, and then enter these into the template. Similarly, if using an existing activity, follow the same process if you haven’t previously identified relevant science outcomes.

Use one checklist per activity.

Educator summary box

Each checklist contains an expandable ‘Educator summary’ box. Its purpose is to:
- record a summary of growth in aspects of learning observed for this group of children
- note areas to be targeted for additional support
- note where further opportunities for developing deeper understanding of concepts or practising inquiry skills could be provided
- identify areas where opportunities to extend learning could be provided.
Checklist for EYLF outcomes: Monitoring science learning

**Plant treasure hunt**

<table>
<thead>
<tr>
<th>EYLF outcomes/Key components for this activity (✓)</th>
<th>Learning outcome/aspects focus for this activity (✓)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome 2</strong> Children become socially responsible and show respect for the environment</td>
<td><strong>Concept understanding</strong></td>
</tr>
<tr>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Child’s name

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**Educator summary: Plant treasure hunt**

Most children in the group...

Some children in the group...

Aspects for which to provide further opportunities to support learning ...

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**Key (evidence of children’s learning)**

- overall, this child has demonstrated this understanding/skill (fully demonstrated); **p** overall, this child is developing this understanding/skill (partially demonstrated);
- overall, this child has not independently demonstrated this understanding/skill (not yet demonstrated); **NA** not a focus of this activity; ✓ Learning outcomes/aspects specifically addressed by each activity
Checklist for EYLF outcomes: Monitoring science learning

**Floating and sinking**

<table>
<thead>
<tr>
<th>Child’s name</th>
<th>EYLF outcomes/Key components for this activity (✓)</th>
<th>Learning outcome/aspects focus for this activity (✓)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome 2</td>
<td>Children become socially responsible and show respect for the environment</td>
<td></td>
</tr>
<tr>
<td>Outcome 4</td>
<td>Children develop a range of skills and processes such as problem-solving, inquiry, experimentation, hypothesising, researching and investigating</td>
<td></td>
</tr>
<tr>
<td>Concept understanding</td>
<td>Inquiry skill: Observe</td>
<td>Inquiry skill: Predict</td>
</tr>
<tr>
<td>✓</td>
<td>✓</td>
<td>NA</td>
</tr>
</tbody>
</table>

**Educator summary: Floating and sinking**

Most children in the group...

Some children in the group...

Aspects for which to provide further opportunities to support learning ...

**Key (evidence of children’s learning)**

- overall, this child has demonstrated this understanding/skill (fully demonstrated); 
- overall, this child is developing this understanding/skill (partially demonstrated); 
- overall, this child has not independently demonstrated this understanding/skill (not yet demonstrated); **NA** not a focus of this activity; ✓ Learning outcomes/aspects specifically addressed by each activity
Checklist for EYLF outcomes: Monitoring science learning

Light and shadows

<table>
<thead>
<tr>
<th>EYLF outcomes/Key components for this activity (✓)</th>
<th>Learning outcome/aspects focus for this activity (✓)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome 2 Children become socially responsible and show respect for the environment</td>
<td>Concept understanding</td>
</tr>
<tr>
<td>Outcome 4 Children develop a range of skills and processes such as problem-solving, inquiry, experimentation, hypothesising, researching and investigating</td>
<td>✓ Shadow formation</td>
</tr>
</tbody>
</table>

Child’s name

Educator summary: Light and shadows

Most children in the group...

Some children in the group...

Aspects for which to provide further opportunities to support learning ...

Key (evidence of children’s learning)

✓ overall, this child has demonstrated this understanding/skill (fully demonstrated); p overall, this child is developing this understanding/skill (partially demonstrated); – overall, this child has not independently demonstrated this understanding/skill (not yet demonstrated); NA not a focus of this activity; ✓ Learning outcomes/aspects specifically addressed by each activity
## Checklist for EYLF outcomes: Monitoring science learning

### Exploring mixtures

<table>
<thead>
<tr>
<th>EYLF outcomes/Key components for this activity (✓)</th>
<th>Learning outcome/aspects focus for this activity (✓)</th>
</tr>
</thead>
</table>
| Outcome 2  
Children become socially responsible and show respect for the environment | Concept understanding |
| Outcome 4  
Children develop a range of skills and processes such as problem-solving, inquiry, experimentation, hypothesising, researching and investigating | Inquiry skill: Observe |
| | Inquiry skill: Predict |
| | Inquiry skill: Record |
| | Inquiry skill: Communicate |

| Child’s name | ✓ | ✓ | NA | ✓ | ✓ | ✓ | ✓ | ✓ |

## Educator summary: Exploring mixtures

Most children in the group...

Some children in the group...

Aspects for which to provide further opportunities to support learning ...

## Key (evidence of children’s learning)

- f overall, this child has demonstrated this understanding/skill (fully demonstrated); p overall, this child is developing this understanding/skill (partially demonstrated);
- – overall, this child has not independently demonstrated this understanding/skill (not yet demonstrated); NA not a focus of this activity; ✓ Learning outcomes/aspects specifically addressed by each activity