

Working Mathematically with Infants

Sample Planner

Years K, 1 & 2

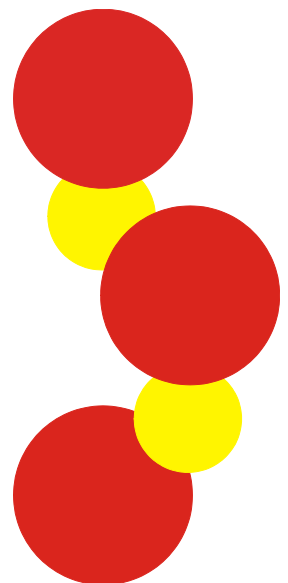
Pages 1 & 2

Principles & Practicalities of Planners

Page 3

Sample Planner: Year 1 Semester 1
NB: The full manual has 6 planning pages
each with 10 weeks of integrated,
sequential number work.

Doug Williams



Curriculum Planners

Our attitude is:

learning is a personal journey stimulated by achievable challenge

Curriculum Planners on the following pages integrate the use of **Threaded Activities** and *Investigations* into 10 weeks of concrete, visual, open-ended, challenging number work per semester, for each semester in each year from K to 2.

- ◆ Typically *Threaded Activities* are used for a few minutes each day, several days per week over several weeks.
- ◆ Typically *Investigations* are used for a block of time - often much more time than is usually set aside for a maths period.

Planners provide a starting point for those new to these materials and a flexible structure for those more experienced. You will need to map the Planner weeks into your local curriculum document. Different teachers and schools will timetable the same planners in different ways, but all will be making use of the same extensively trialed materials, activities, investigations and pedagogy, which for others has produced:

happy, healthy, cheerful, productive, inspiring classrooms

Threaded Activities are shown in bold.

- ◆ The first time one is used it sometimes takes a substantial part of a session to introduce. Therefore they are shown as the only activity during this introduction session. You will also need other 'standby' activities for these sessions.
- ◆ Introduction sessions are highlighted with a background colour.
- ◆ Identifying the first use of a Threaded Activity in this way also serves to identify the introduction of new content in the development of the planning sequence.
- ◆ Threaded Activities can be used with the whole class as starter activities; and can be used as small group activities (including with your teaching group); and can be combined with any other best practice you already use. Their critical property is that, once learnt, they need to be used for 10-15 minutes per day, several days per week over several weeks. Planners have been structured in this way.

Investigations are shown in italic.

- ◆ Investigations frequently captivate children and need to be continued beyond a single time slot. Therefore they are shown in the first session of a week in the expectation that they will need to run over more sessions.
- ◆ Sometimes teachers continue an Investigation into the following time slots of the same day. Sometimes continuation is built in as group work in mathematics slots on following days.
- ◆ Investigations will teach, review and develop content but their main purpose is to absorb children in learning to work like a mathematician (see p. 11).

Planning Points

- ◆ Planners assume four lessons per week of about 1 hour each.
- ◆ Planners *do not* prescribe a continuous block of work. Use them flexibly.
- ◆ Planners offer *only* 10 weeks per semester and those weeks are almost exclusively in number. They do not represent a full year's curriculum.
- ◆ Map these weeks into your program then complete your year as appropriate.
- ◆ There *is* a developmental flow when the planners are viewed as a whole from Year K to Year 2, however, there is plenty of room for flexibility within and across Year levels. Your children will guide you.

Using The Planners

- ◆ Choose a week. It is most likely to include both Threaded Activities and an Investigation.
- ◆ Find out more about the Threaded Activities by:
 - (a) reading its introduction in the Threaded Activities section from Page 22.
 - (b) exploring its depth on site.
- ◆ Find out more about the Investigation by reading its description in the Investigations section from Page 37.
- ◆ Descriptions are all the detail you need to explore the problem. However, most Investigations can be enriched by reading the additional detail stored in the web links listed for each investigation. Task Cameo links are public access. Maths300 links require membership of that site. These are the only additional links used.
- ◆ Map the week into your syllabus.

Questions

- ◆ Can I use Planner activities in weeks other than those ten?
Absolutely. Planners offer a starting point. There will be many times when you or your children will want to continue using what the Planners offer.
- ◆ Can I use in my current year an activity or investigation listed for another year?
Certainly, provided you break from the planning sequence as part of a team planning approach from Years K - 2.

Expect to be surprised by what your children can do!

Additional Resources

For the most part Investigations use Poly Plug or calculators or other materials normally available in classrooms. However you will also need:

Dominoes - Year 1 - *Domino Trails*

Cuisenaire Rods - Year 2 - *Rod Mats*

Further, many Investigations require printing and preparing game boards or other resources. Plan well ahead to allow enough time for this preparation.

In many Investigations, you will notice reference to the children's mathematics journal. In the early years this will be made for them page by page as they record their understanding. By Year 2 however, a self-maintained journal is an expectation. As well as consolidating learning, journals offer significant assessment information.

Curriculum Planner

Year 1 ... Semester 1

| | Session 1 | Session 2 | Session 3 | Session 4 |
|----------------|---------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------------|---------------------------------------------------------------------------|
| Week 1 | Free Play | Activities from FP and/or activities from Year K, such as... | Move Around Bridging 10 Secret Spaces | Number of the Day Counting On Buttons |
| Week 2 | <i>Around Our Neighbourhood</i> | Rory's Pattern Game | Rory's Pattern Game Move Around Bridging 10 Secret Spaces | Rory's Pattern Game Number of the Day Counting On Buttons |
| Week 3 | Cross Off | Cross Off Rory's Pattern Game Move Around | Cross Off Bridging 10 Secret Spaces | Cross Off Rory's Pattern Game Number of the Day |
| Week 4 | <i>Jumping Joey</i> | Cross Off Counting on Buttons | Plug Catcher | Plug Catcher Cross Off Rory's Pattern Game |
| Week 5 | Add Town | Add Town Plug Catcher Cross Off | Add Town Plug Catcher Cross Off | Add Town Plug Catcher Cross Off |
| Week 6 | <i>Lining Up</i> | Ten Tens | Ten Tens Add Town Plug Catcher | Ten Tens Add Town Plug Catcher |
| Week 7 | Number Shapes | Number Shapes Ten Tens Add Town | Number Shapes Ten Tens Add Town | Number Shapes Ten Tens Add Town |
| Week 8 | <i>Back To Back Building</i> | Broken Calc Probs | Broken Calc Probs Number Shapes Ten Tens | Broken Calc Probs Number Shapes Ten Tens |
| Week 9 | <i>Visual = Number</i> | | Broken Calc Probs Number Shapes Ten Tens | Broken Calc Probs Number Shapes Ten Tens |
| Week 10 | <i>Domino Trails</i> | | Broken Calc Probs Number Shapes Best of semester | Broken Calc Probs Number Shapes Best of semester |

- ◆ Map these weeks into your curriculum:
For example, will you map *Planner* Week 1 to *Your* Term 1 Week 2 or ...?
- ◆ **Threaded Activities** are in **bold**. Details from Page 22 linking to more on site.
- ◆ *Investigations* are in *italic*. Details from Page 37 linking to more on the web.