

Ants in the Apple

Numeracy

In-service Outline

| Time | Content |
|------------------------|--|
| 9.00 am – 9.30 am | Session 1 <ul style="list-style-type: none">• What does the research say about teaching numeracy?• The Cascade model• Language and comprehension in mathematics |
| 9.30 am – 10.00 am | Session 2 <ul style="list-style-type: none">• Assessment<ul style="list-style-type: none">• Diagnosis of errors• Programming for remediation |
| 10.00 am - 10.30 am | Session 3 <ul style="list-style-type: none">• Teaching Strategies<ul style="list-style-type: none">• Explicit teaching (task analyses of the four operations; pre-requisite skills)• The place of rote learning• Series saying• Guided practice; corrective feedback; mental gymnastics |
| 10.30 am – 11.00 am | <i>Morning Break</i> |
| 11.00 am – 12.00 pm | Session 4 <ul style="list-style-type: none">• Kindergarten<ul style="list-style-type: none">• Sorting and classifying• Ordering• Patterning• Numbers – writing, ordering, counting, etc.• Mathematical language• Data: more than / less than |
| 12.00 pm – 1.00 pm | Session 5 <ul style="list-style-type: none">• Basic Number Facts and Fact Families<ul style="list-style-type: none">• Addition and Subtraction (commutative law of addition; inverse relationships; activities for practice)• Multiplication and Division (commutative law of multiplication; inverse relationships; activities for practice) |
| 1.00 pm – 1.30 pm | <i>Lunch</i> |
| 1.30 pm – 3.00 pm | Session 6 <ul style="list-style-type: none">• Teaching Each Operation<ul style="list-style-type: none">• Addition (re-write, count-on; carrying; missing addend; adding zero)• Subtraction (count-back; decomposition/renaming; missing subtrahend/minuend/; subtracting zero; subtracting for zero in 10s, 100s, 1000s columns)• Multiplication (multiplication strategy; estimation)• Division (division strategy, remainders) |