

To Proficiency & Beyond: A Strategic Approach to Addition and Subtraction

NUMBER FACT STRATEGIES

ADDITION

- Count-on 1, 2 and 0
- Doubles and near doubles
- Make ten

SUBTRACTION

- Think addition

TEACHING SEQUENCE

- Introduce (see page 2)
- Reinforce (see page 2)
- Practice (see page 4)
- Extend (see page 4)

Sequence for Teaching Skills

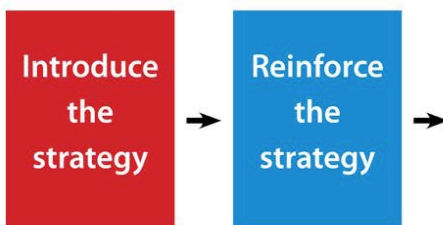


This stage involves the use of **concrete** materials and **pictorial** representations to model the strategy.

At this first stage, ORIGO resources also include **contextual situations** to provide meaning.



Sequence for Teaching Skills

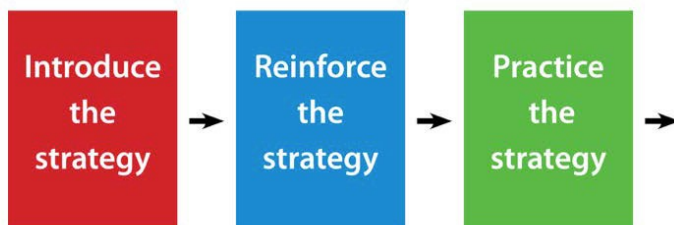


This stage provides the opportunity for the students to **assimilate** and **internalize** the strategy.

It is an additional link that **connects** the models of the introductory stage to the symbols of the practice stage.



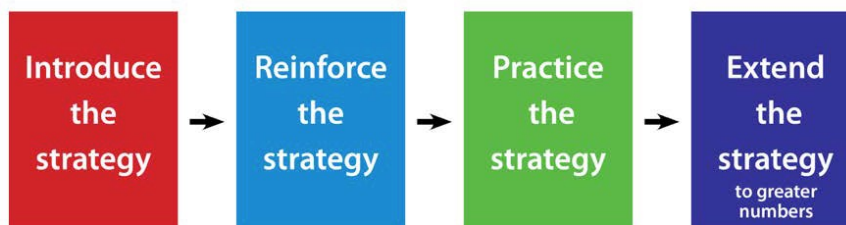
Sequence for Teaching Skills



This stage aims to develop **accuracy** and increase **speed** of recall.

In this stage, a range of different types of written and oral activities is used.

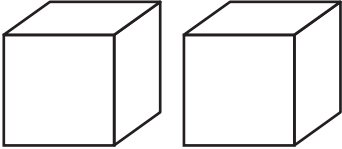
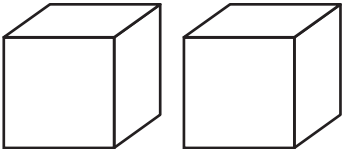
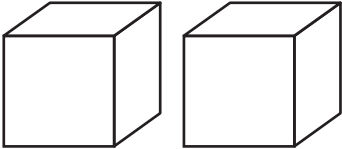
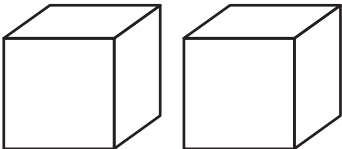
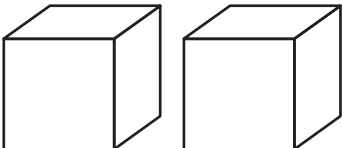
Sequence for Teaching Skills

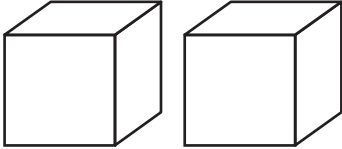
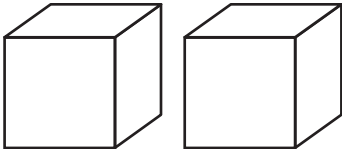
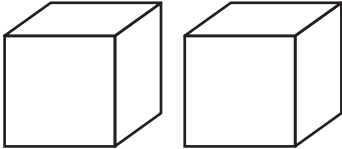
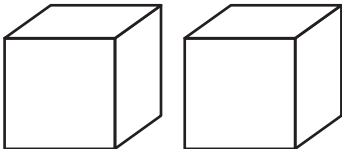
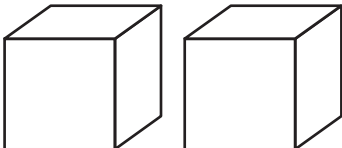


This stage moves the strategy to examples **beyond** the number fact range, including computation with **decimals**.

REINFORCE: Count on 1 and 2

- Roll your number cubes and count on 1 or 2.
- Find your answer below.
- Write your numbers on the number cubes. Write the number fact.

 $\underline{\quad} + \underline{\quad} = 11$
 $\underline{\quad} + \underline{\quad} = 5$
 $\underline{\quad} + \underline{\quad} = 9$
 $\underline{\quad} + \underline{\quad} = 8$
 $\underline{\quad} + \underline{\quad} = 7$

 $\underline{\quad} + \underline{\quad} = 6$
 $\underline{\quad} + \underline{\quad} = 8$
 $\underline{\quad} + \underline{\quad} = 7$
 $\underline{\quad} + \underline{\quad} = 6$
 $\underline{\quad} + \underline{\quad} = 10$

Cube A: 4, 5, 6, 7, 8, 9

Cube B: 

REINFORCE: Doubles-plus-1

11	19	13	15
13	9	17	19
17	11	15	9

Cube: 4, 5, 6, 7, 8, 9 (Same as previous game)

INTRODUCE: Make Ten

REINFORCE: Make Ten

- Roll your number cubes and write the fact below the example in the grid that will help you figure out the answer.
- Write the answer to both facts.

$10 + 6 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
$10 + 5 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
$10 + 5 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
$10 + 4 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
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$10 + 2 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
$10 + 1 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$

$10 + 6 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
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$10 + 2 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
$10 + 1 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$

Cube A: 8, 8, 8, 9, 9, 9

Cube B: 3, 4, 5, 5, 6, 7

CONNECT ADDITION AND SUBTRACTION

Take or Tally

Player 1

Player 2

$13 - \underline{\quad} = \underline{\quad}$	$13 - \underline{\quad} = \underline{\quad}$
$12 - \underline{\quad} = \underline{\quad}$	$12 - \underline{\quad} = \underline{\quad}$
$11 - \underline{\quad} = \underline{\quad}$	$11 - \underline{\quad} = \underline{\quad}$
$10 - \underline{\quad} = \underline{\quad}$	$10 - \underline{\quad} = \underline{\quad}$
$9 - \underline{\quad} = \underline{\quad}$	$9 - \underline{\quad} = \underline{\quad}$
$8 - \underline{\quad} = \underline{\quad}$	$8 - \underline{\quad} = \underline{\quad}$
Tally	Tally

Cube A: 1, 2, 3, 1, 2, 3

Cube B: 7, 8, 9, 10, 11, 12