

Counting Boxes

Counting Boxes Workshop 1 provides children with their first counting activities. By manipulating animals, then plain counters (more symbolic), they learn to count, make sets, read numbers and know their order (from 1 to 5). They carry out the transfer from a concrete object to its mathematical representation.

Educational objectives

- Reading and understanding a simple model card.
- Carrying out a proposed task.
- Making a set of objects equivalent to a given set.
- Performing term-to-term correspondence.
- Replacing a figurative object by a symbolic counter.
- Reading and understanding the first 5 numbers.
- Discovering the natural order of numbers from 1 to 5.

Recommended ages

- From the age of 3.

Playing materials

- 4 counting boxes in which model cards can be inserted.
- 36 model cards divided into 9 series of 4 cards each.
- 100 round transparent blue plastic counters.
- 60 animal counters in coloured wood: 15 elephants, 15 penguins, 15 bear cubs, 15 tigers.

Instructions for use

Unstructured workshop

- Let the children explore the animals on their own, describe, name, sort them and make up stories with them.
- Then give them the boxes to use as they like, i.e. the compartments of a box can be the animals' "houses".
- Let them manipulate the counters as well, placing them randomly in the compartments, putting them in correspondence with the animals...
- This exploration phase will make it easier for the children to understand the model cards and the given tasks.

Structured workshop (for 4 children)

- Begin by reading the cards with the children and showing them how to place them on the box. Have them identify and decode the 2 parts of the instructions: the circle in the upper left of the card indicates which type of counter is needed, the illustrations in the 5 squares define the task.
- Once the children are familiar with how to read the model cards, hand out the rest of the materials.

Workshop 1



- Each child should have one counting box and one card. These materials are designed for 4 children to work at the same time using the 4 cards from the same series. They can exchange cards if they like.
- The children can also exchange their counting boxes. This gives them the chance to use their mathematical skills once again to "correct" the neighbour's box and to discuss, debate and explain in case of disagreement. The teacher's presence enables the procedures of each child to be verbalised and any misunderstandings to be resolved. This exchange also provides a different way of evaluating each child's progress.

Progression

- **Cards 1 to 8**
 - *Counters used:* animals.
 - *Objective:* making up a set with the same number of objects as another shown set: term-to-term correspondence.
- **Cards 9 to 16**
 - *Counters used:* plain.
 - *Objective:* placing as many counters as animals shown: coding.
- **Cards 17 to 24**
 - *Counters used:* animals.

– *Objective:* placing as many animals as clusters shown: decoding.

- **Cards 25 to 28**

– *Counters used:* animals.

– *Objective:* associating a written number (from 1 to 5) with a set of objects: counting.

- **Cards 29 to 32**

– *Counters used:* plain.

– *Objective:* associating a written number with a quantity: counting.

- **Cards 33 to 36**

– *Counters used:* animals.

– *Objective:* discovering the ordered sequence of the numbers from 1 to 5: nursery rhymes with numbers.

Extension Ideas

- The animal and plain counters can be used for other number-related manipulation activities.
- Original model cards can be created by using any other small materials found in the classroom; this transfer is a chance to test achievement.
- To take abstraction one step further, model cards can be made using stickers.
- To introduce the numbers from 0 to 10, use *Counting Boxes Workshop 2*.