

## Learning Unit 4: Comparison



Comparing activities are very important in early mathematical learning because they form the basis for many mathematical skills.

### Important Skills for Promoting Comparison

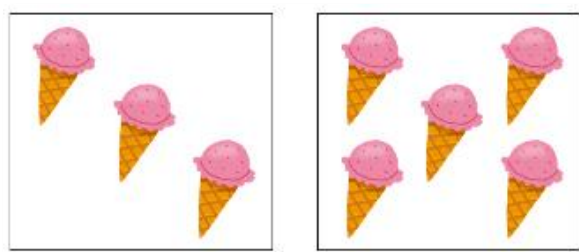


Answering questions of comparison, like which number is bigger among a set of numbers is a relevant basic skill (Jordan et al., 2010). Selecting the set with more or the set with less are also common skills that help children making comparisons and develop quantitative reasoning (Sarama & Clements, 2009), as well as equalizing sets based on the relative size of numbers (Baroody & Wilkins, 1999).

In early mathematical learning, a distinction can be made between comparing numbers and comparing quantities, for example. To promote these skills, a few ideas are outlined here.

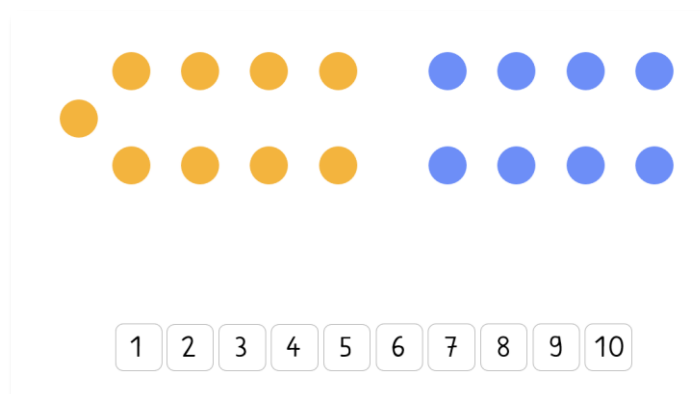
#### Quantity Comparison:

One task could be for the children to compare two groups of objects. For example, they might have to identify which group has more or fewer objects (see example 1). Comparing two groups can be done, for instance, by matching the objects one by one.



*Example 1*

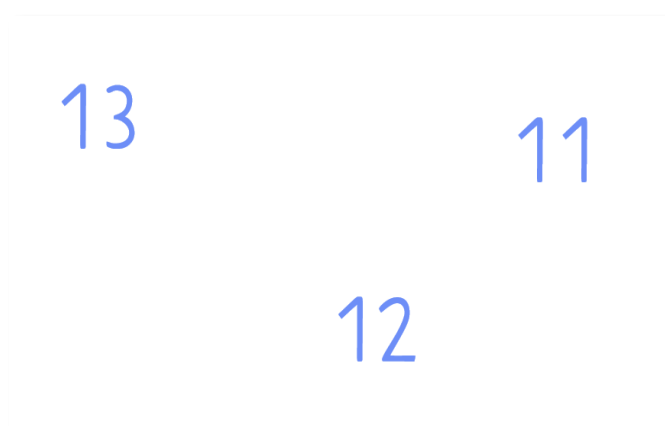
The task can also be designed so that the children must determine the difference between two given quantities (see example 2).



*Example 2*

### Number Comparison:

In addition to quantities, numbers can also be compared. For example, the children must compare two or three numbers (see example 3). The numbers can be arranged horizontally or in any order (random arrangement). Specifically, the children should then determine the smallest or largest number. The aim should be to compare numbers up to 10. Some children can even do this with numbers up to 20.



*Example 3*

This unit has highlighted the importance of comparison in early mathematical learning.

The next learning unit deals with the area of operations, specifically addition and subtraction.



## References

- Baroody, A. J., and Wilkins, J. L. M. (1999). The development of informal counting, number, and arithmetic skills, and concepts. In J. V. Copley (Ed.), *Mathematics in the early years* (pp.48–65). National Association for the Education of Young Children.
- Jordan, N. C., Glutting, J., & Ramineni, C. (2010). The importance of number sense to mathematics achievement in first and third grades. *Learning and Individual Differences*, 20(2), 82–88. <https://doi.org/10.1016/j.lindif.2009.07.004>
- Sarama, J., & Clements, D. H. (2009). *Early childhood mathematics education research: Learning trajectories for young children*. Routledge.