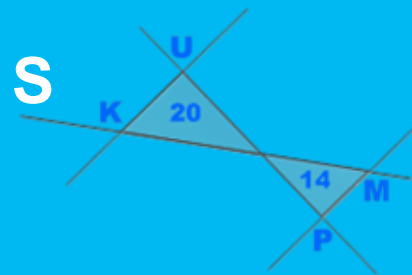
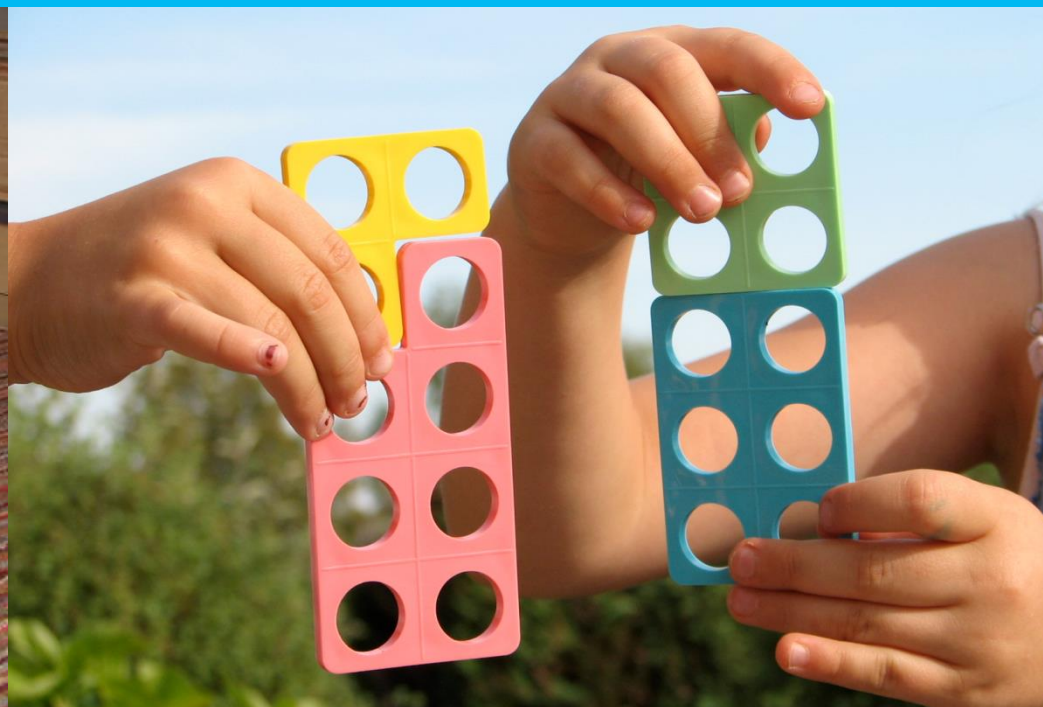


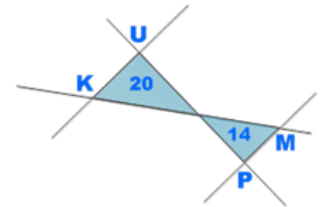
RAZVOJ TEMELJNIH ŠTEVILSKIH KONCEPTOV S POMOČJO NUMICONA



Katja Čadež, Polona Čuk Kozoderc, Danilo Kozoderc



Zavod Republike Slovenije za šolstvo
The National Education Institute Slovenia

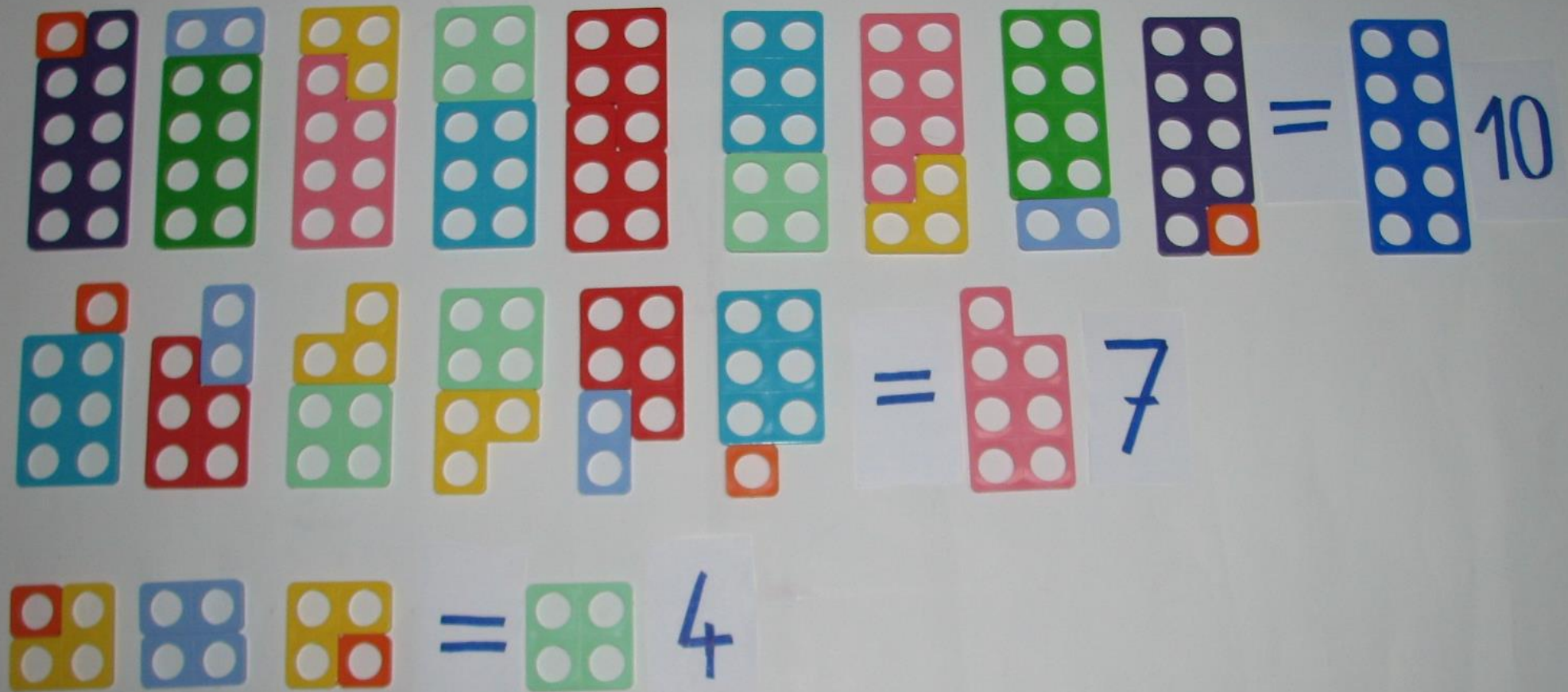


- Matematična igralnica
- Ustvarjalna znanost
- Predavanja in delavnice za starše in pedagoške delavce
- Karierna orientacija
- Didaktični materiali

Številski didaktični sistem



Konceptualne podobe



Miselni kolaž otrok

Vtisi

Izkušnje

*Roke so instrument človekove
inteligence.
Ne dajte glavi več, kot date rokam.
Maria Montessori*

Rokovanje s konkretnimi materiali



A close-up photograph of a person's hands holding a blue drawstring bag. The person is wearing a white zip-up hoodie. A pink, rectangular tactile grid with four circular holes is placed over the bag's opening. The person's right hand, wearing a gold ring, is holding the top of the grid. The left hand is holding the bottom of the bag. The text "Pokaži, katero obliko si otipal!" is overlaid on the image in white, bold font.

Pokaži, katero obliko si otipal!

Videti odnose med števili



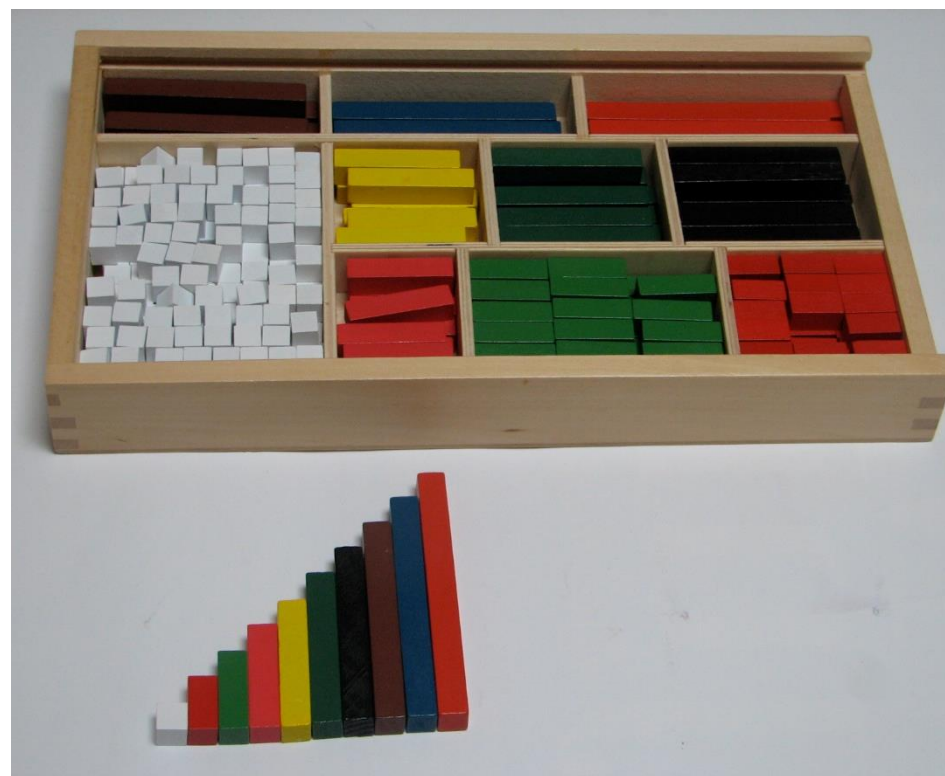
**Ustvarjati
odnose
med
števili**

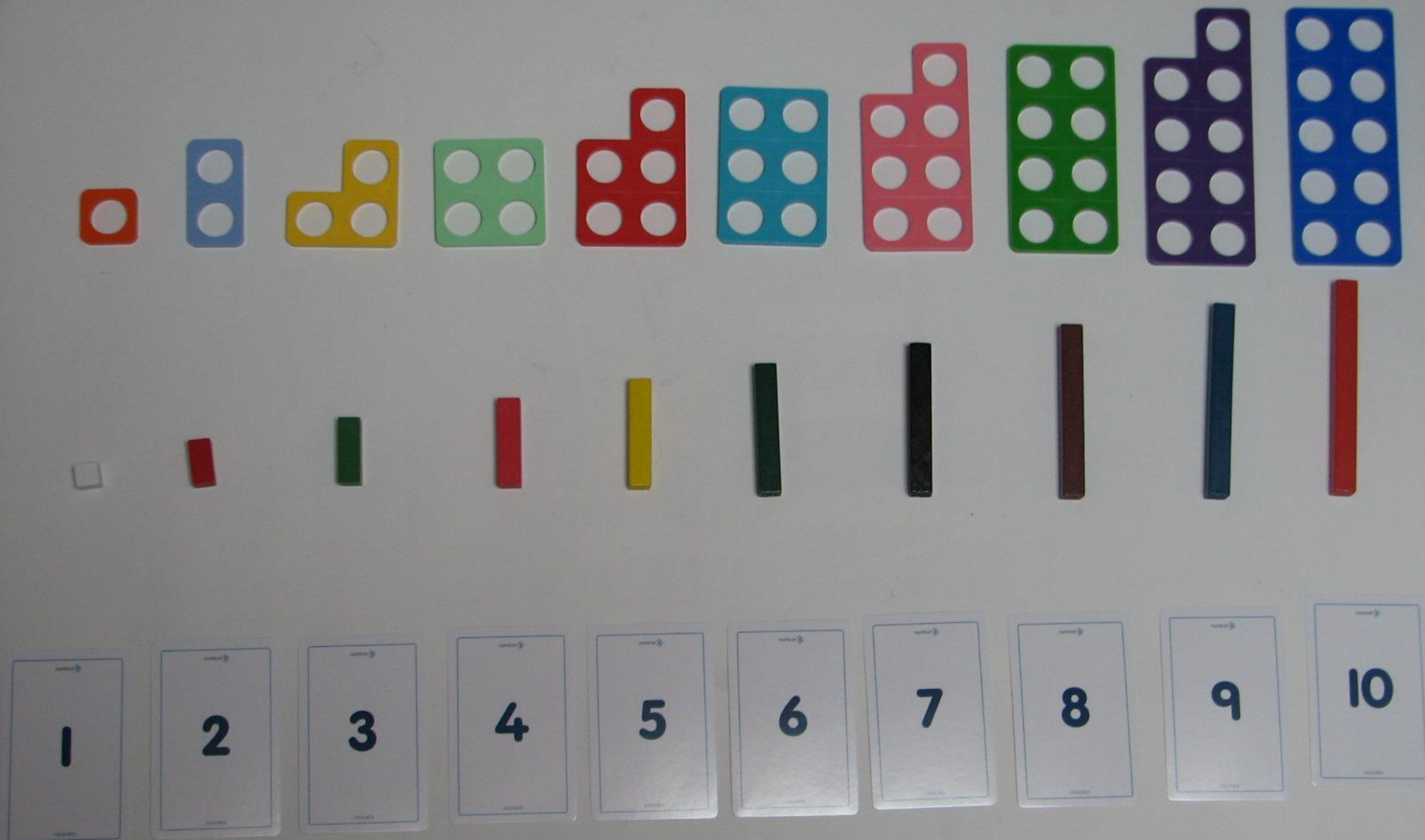
Dva nabora strukturiranih konkretnih podob

Numiconove oblike
(bolj konkretno)



Številke palčke (bolj abstraktno)

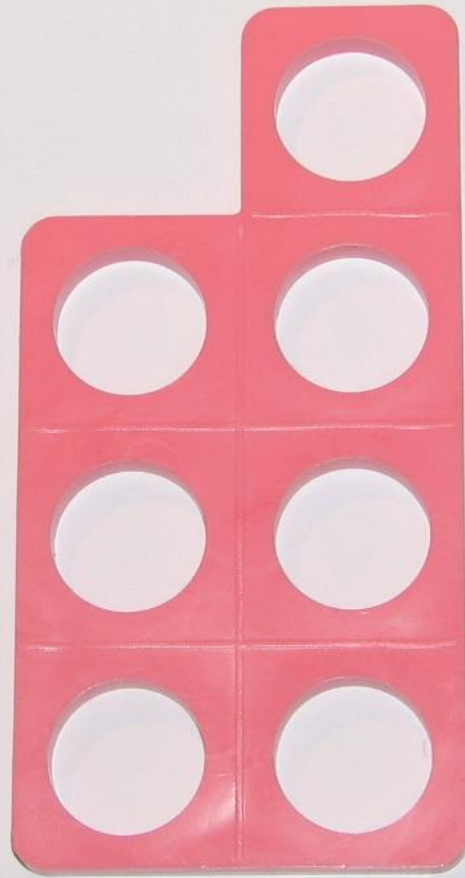




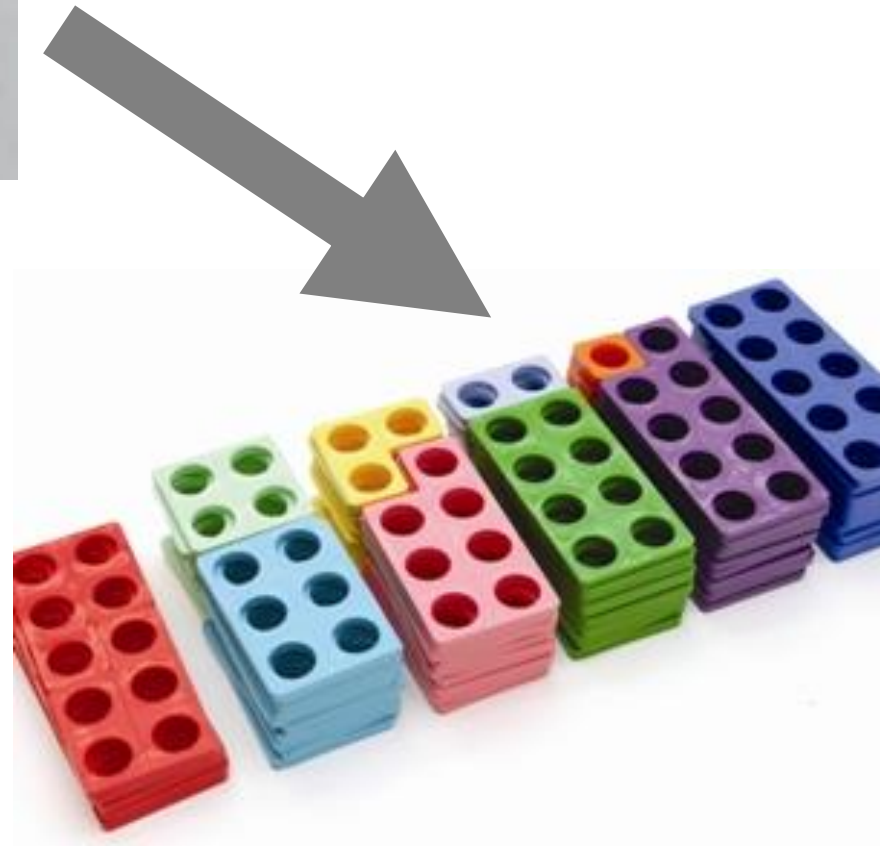
Od konkretnega k abstraktnemu



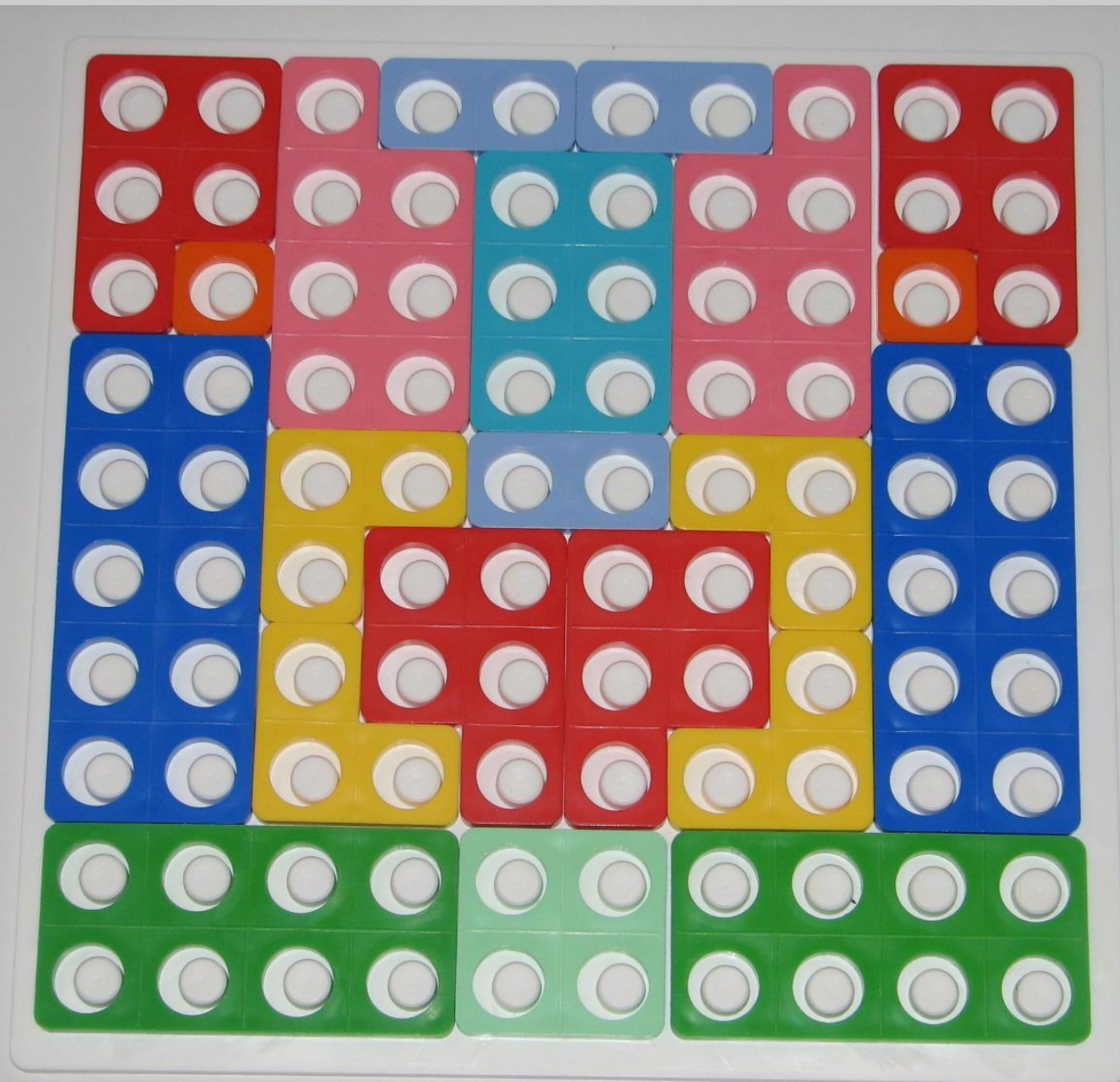
Število – ideja po sebi



**NEštevilске dejavnosti
NE prehitevaj !**



Simetrija



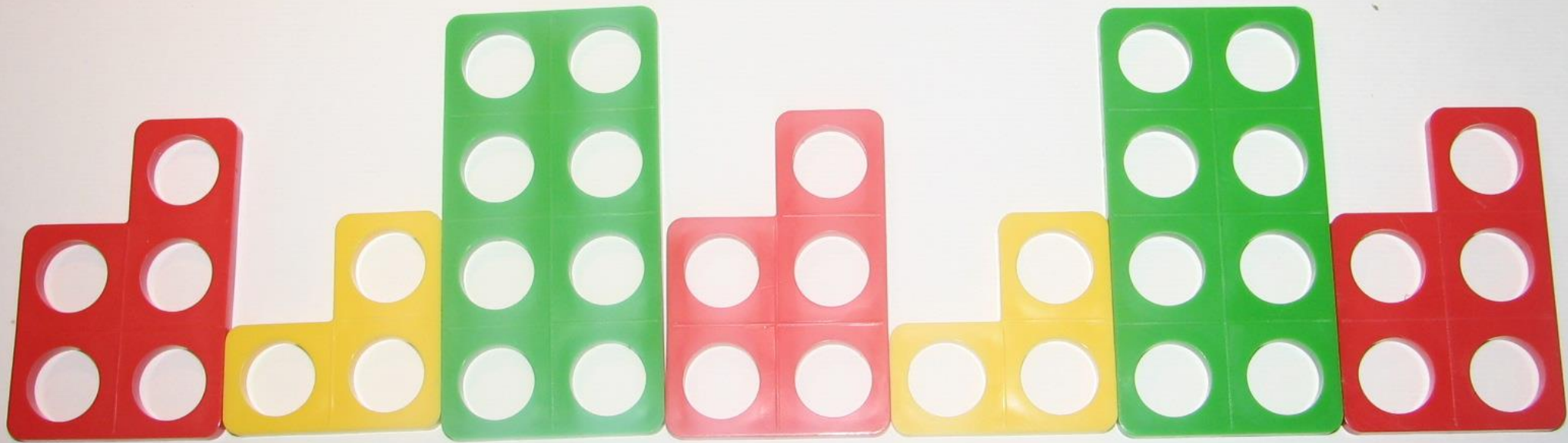
Prekrivanje – rotacija, translacija



S čepki kopiraj obliko



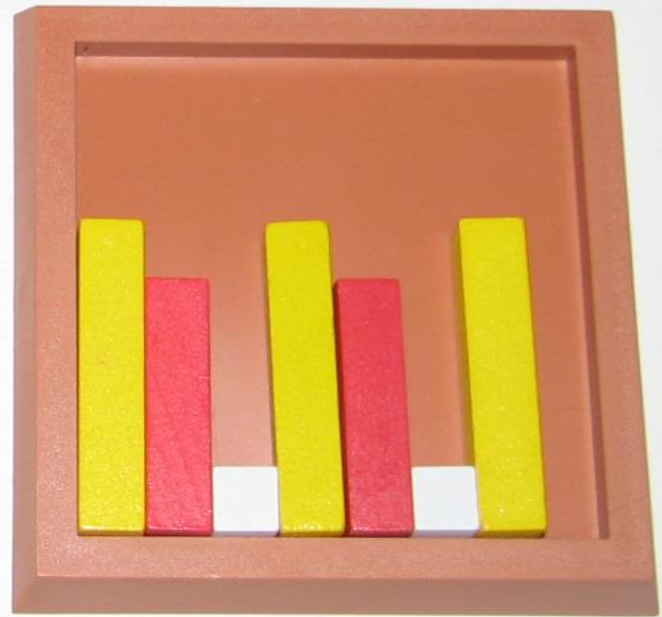
Vzorci

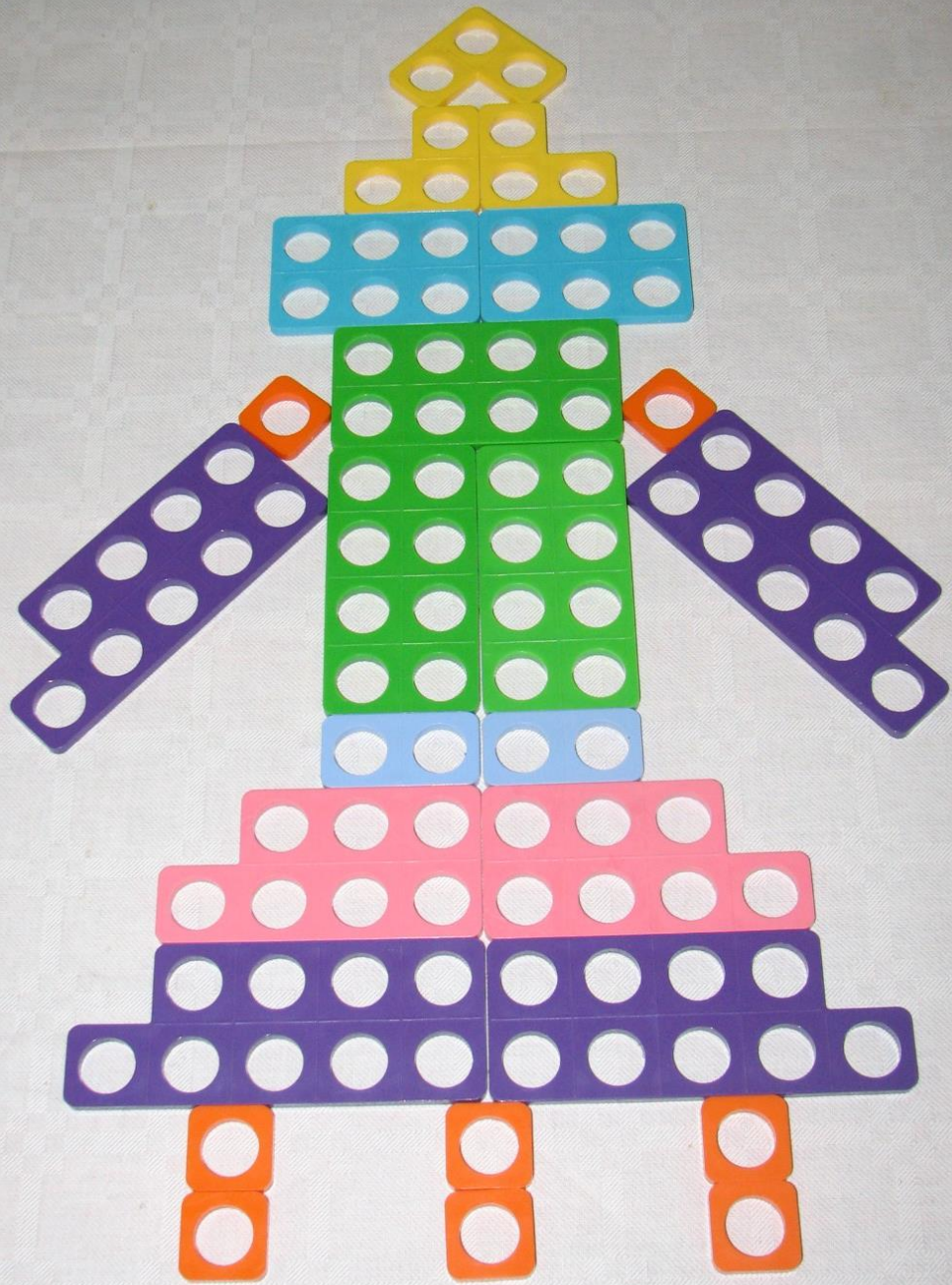


3 5 3 5 3

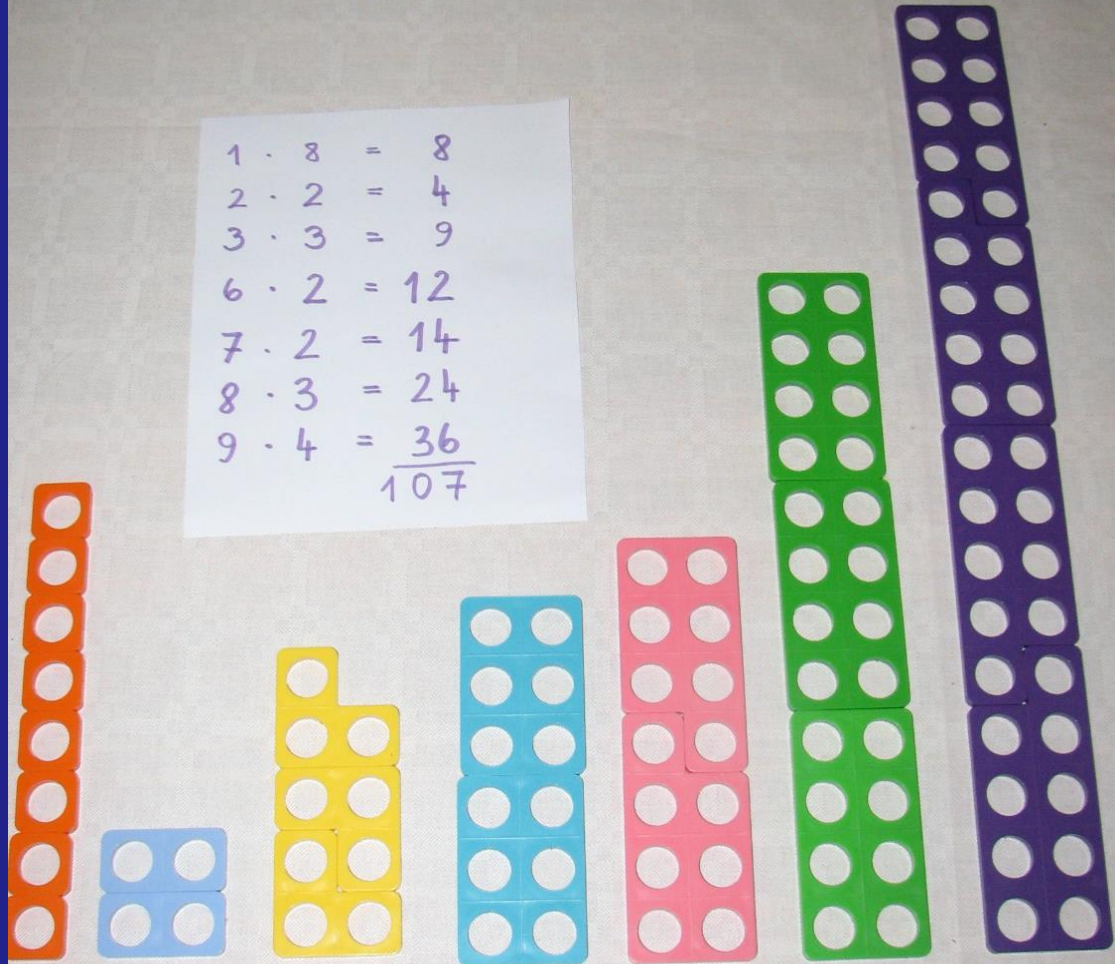
5 3 7 5 3 7

4 8 8 4 8 8





1 · 8 = 8
2 · 2 = 4
3 · 3 = 9
6 · 2 = 12
7 · 2 = 14
8 · 3 = 24
9 · 4 = 36
107



Pozitivni odnos do matematike



