

Sensorial



„The Key to the World”

Children are curious and active. They gain a wide variety of experiences via the senses. The sensorial materials by Maria Montessori provide children with the possibility to structure this variety.

The appeal of the shape's colour, shine and harmony encourages activities and guides the children into a deep form of concentration. The isolation of just one feature each within one material helps to direct the attention to this feature, which is only rarely possible in the real world. By means of objects, children learn to recognize features, which are sorted, graded,

paired and compared. This way, the world becomes accessible to them and an elemental foundation for geometry, math, biology, arts and music is created.

Since the different sensory areas are addressed, trained and moulded, the material supports the child's development. By differentiating perception, intelligence and personality are developed.

The individual support for children is made possible by the variable difficulty levels. Due to a learning control, the children work independently and autonomously.

Tactile Sense

Info

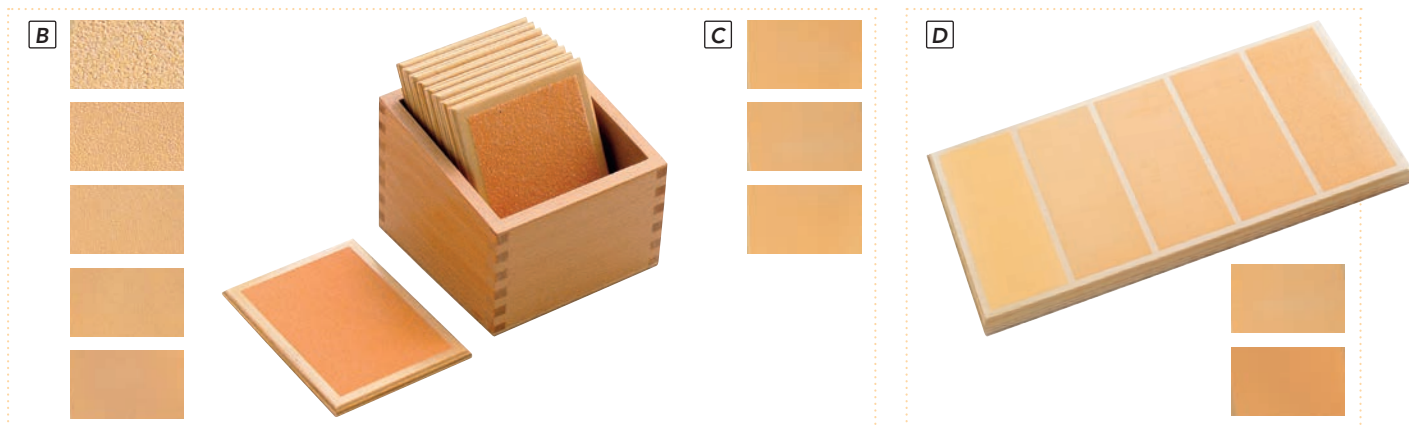
“From the Hand into the Head”

Perception with all senses is indispensable for integral learning. In this respect, the tactile perception has a very important function as well. With a well-developed tactile and visual perception, children are learning in a sustainable manner. The more sensory perceptions are addressed, the better the things perceived are retained in memory.

Gradation Tablets

With differently grained surfaces to train the tactile sense.

- A 130194 Rough and Smooth Boards**
(3 tablets, each length 24 x width 13 x height 1 cm)
- B 130195 Touch Boards with Box,**
bin with 5 tablet pairs;
Dimensions: tablets 9 x 12 cm, bin 11.5 x 11.5 x 9 cm.
- C 130196 Smooth Gradiation Tablets**
bin with 5 tablet pairs;
Dimensions: tablets 9 x 12 cm, bin 11.5 x 11.5 x 9 cm.
- D 130197 Smooth Gradiation Board,**
5 gradings, length 24 x width 13 x height 1 cm.



Blindfold

- E 096715 White, 10 ea.**
- F 130273 Black, 1 ea. (with Velcro Fasteners)**

Blindfold

With these, children can completely focus on sensing or hearing instead of trying to keep their eyes shut. And they learn to not only depend on their visual sense.

Material: 100% cotton. Can be washed by hand.





130269 Thermic Tablets

Although all objects in a room usually have the same temperature, they differ in how warm or cool they feel. This is caused by the specific thermal conductivity of the substances. Therefore, we perceive, for example, felt as being much „warmer“ than iron, although both actually have the same temperature - i.e. the room temperature. By touching with the hand the child can perceive the „temperature differences“ and compare and match the pieces by pairs. The wooden box with tenon joints contains 2 pieces each of different materials: wood, iron, glass, cork, felt and marble.

Dimensions: Box 10 x 13 x 5.5 cm, pieces 8 x 4 cm.



130279 Tasting Exercises

Wooden tray with 8 bottles. The bottles can be filled with different fluids, which the children then have to taste and identify by a little drip of the fluid from the pipette. Flavors like sweet, sour, salty or bitter are supposed to be recognized and the individual impressions further described - an excellent exercise for improving the sense of taste! With yellow and/or red caps, the bottles can also be arranged in pairs.

Dimensions: Approx. Ø 1 x height 9 cm. Delivered without contents.

Warning. Not suitable for children under 3 years. Small parts. Choking risk.



130278 Smelling Bottles

2 wooden boxes with 6 empty smelling bottles each, in which cotton balls are placed, which have been drenched in different scents. The children are supposed to identify the different scents by smelling, name them and identify equal odors. Besides the processing of the terms pertaining to the topic „Scents“, most of all the sense of smell is sensitized. The bottles have a practical screw top and can be refilled again and again.

Dimensions: Approx. Ø 3 x height 9 cm. Delivered without contents.

Warning. Not suitable for children under 3 years. Small parts. Choking risk.



130272 Thermic Bottles

The little bottles can be filled with water at different temperatures. In order to sort the bottles according to temperature or to identify bottles of the same temperature, the children must depend completely on their thermo-reception, because there is no way of cheating due to the identical bottles.

Contents: Wooden box with 8 metal bottles with screw tops.

Warning. Not suitable for children under 3 years. Small parts. Choking risk.

Feeling



Mystery Bags

Can you feel and identify the items in the pouch? Guided by the sense of touch, the children are challenged to find matching pairs.

130268 Fabric Pouches, empty

Warning. Not suitable for children under 3 years. Long string/long chain. Strangulation risk.

130266 Fabric Pouches each with 10 geometric shapes

Warning. Not suitable for children under 3 years. Small parts. Choking risk. Long string/long chain. Strangulation risk.

1302671 Fabric Pouch with 10 familiar items of life e.g. cone, ring, key, etc.

Warning. Not suitable for children under 3 years. Small parts. Choking risk. Long string/long chain. Strangulation risk.

Hearing

130247 Sound Boxes

2 wooden boxes with colored lids and each with 6 different closed wooden containers, which when shaken will cover the sound range from low to loud. Each fill of the red set is identical with one of the blue set. Identifying sound pairs promotes the acoustic perception and trains the auditory memory.

Dimensions: Container Ø 3 cm, height 9 cm, box 12.5 x 9 x 10.5 cm.



130198 Baric Tablets with Box

For the development of the baric sense (sense for heaviness). Set containing 3 bins with 7 tablets each (approx. 4 x 8 cm) made from wood that differs in weight.



130249 Fabric Box

Wooden box with 6 pairs of different fabrics: Cotton, wool, jute, silk, leather and synthetic fabric. By feeling the different surfaces, the sense of touch is trained and improved.



130283 Pressure Cylinders

Wooden tray with 6 cylinders that belong together and which have different pressure drags. The children can push in the pin, which is located on top of the wooden cylinder, and this way get a feeling for the different drags.



- A** 130183 1st Box (3 pairs of color tablets in 3 colors: red, yellow, blue)
- B** 130184 2nd Box (11 pairs of color tablets in 10 colors: red, yellow, blue, orange, green, purple, pink, gray, black, white)
- C** 130192 3rd Box (63 color tablets in 9 colors: red, yellow, blue, orange, green, purple, pink, gray, brown)
- D** 130193 4th Box (64 color tablets in 8 colors: red, yellow, blue, green, purple, pink, gray, brown. Per color 4 pairs in different shades)

Color Tablets

While comparing and sorting the different color tablets, visual perception and sense of color are trained. In addition to the primary colors, children are getting to know the grading of color in different nuances or shades from light to dark. The color tablets have a white frame for better handling and can be stored after use in the wooden box with lid that comes with them.



Stairs

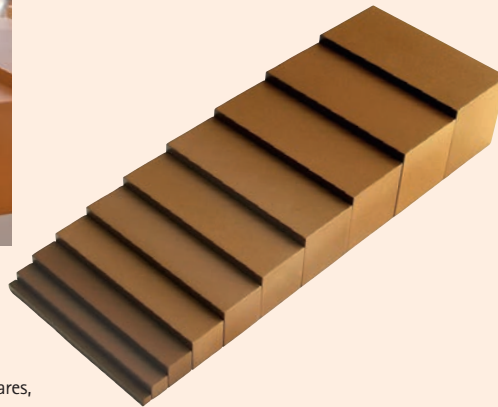
130976 Brown Stairs

10 wooden prisms, 20 cm long. The sides are squares, whose edge lengths decrease from 10 cm to 1 cm. The additional little cuboid that comes with it serves as control of success, as the size of the next cuboid is exactly as much smaller as the size of this cuboid.

130154

Box with Prisms for Brown Stairs

Material for copying and comparing the volume of the steps of the brown stairs. 19 wooden prisms (1 x 1 x 20 cm), natural finish, in a little wooden box with lid.



Info

The “mathematical mind” becomes apparent in a child as soon as they start to compare, sort, count and measure.

The sensorial material supports this development because here, children can actively deal with mathematical features like size, length, amounts and shapes.

The experiences that have been gained with the sensorial material, which are still subconscious, can be structured, sorted and classified by the child with the help of the math materials.

With the math materials, such as the red rods, blue-red rods, and/or numerical rods, children get to know the amounts 1 – 10 and thus gain an insight into the metric system.

With the 45 mandrels and the respective mandrel box, children get to know the number amount by its name and numeral, which can also be supported by sandpaper numbers. But also the golden pearl material enables children to gain an insight into the decimal system as basis for metric systems.



E 130157 Long Red Rods

The material draws the attention of the child to the feature of „length“ and „differences in length“. The red rods are an ideal preparation for the numerical rods. Especially the different possibilities for evening out have a propaedeutic function for learning adding and subtraction. The largest rod corresponds in length with the smallest and the second-largest rod together, etc.

Contents: 10 massive red wooden rods with square side surfaces of 2.5 cm and different lengths ranging from 10 cm and 1 m.

F 130169 Stand for Long Red Rods

For space-saving storage of the red rods.
Material: Birch veneers.
Dimensions: 39.5 x 9.5 cm.



H



G 130147 Pink Tower

H 130148 Pink Tower Stand

The classic among the Montessori materials - just as ingenious as simple! Besides the establishment of fundamental mathematical insights, the objectives are also the development of the eye-hand coordination, the harmonizing of the motion sequences and the perceiving of differences in size with a shape that stays the same. A second small cube is included for demonstrating the increasing dimensions from one cube to the next larger one.



130149

Box with Cubes for Pink Tower

Material for rebuilding and calculating the volume of the cubes of the red tower. 273 wooden cubes (1 x 1 x 1 cm) in a wooden box with lid.

Warning. Not suitable for children under 3 years. Small parts. Choking risk.



Info

The cylinder blocks are a material that is consistently geared at sensory perception and which is especially intriguing due to its simplicity. This is mainly achieved by isolating and varying one feature on which the child is focusing completely. During individual exercises with the different blocks, terms like thick – thin, narrow – wide, flat – deep, etc. are developed and fundamentals for mathematical comprehension are acquired. Every wooden block has slots for 10 each wooden cylinders with knob. Dimensions: Wooden block 46 x 7.5 x 7.5 cm. Cylinder Ø from 1 – 5 cm, height 1 – 5 cm.

Savings for Sets!

130888 Cylinder Block Set, parts 1 – 4
A set consists of the item numbers 130142, 130143, 130144 and 130145. Dimensions: Wooden block 46 x 7.5 x 7.5 cm. Cylinder Ø from 1 – 5 cm, height 1 – 5 cm.

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Cylinder Blocks



130142 Cylinder Block 1

The cylinders are changing in three dimensions. Height and diameter are increasing consistently.

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130143 Cylinder Block 2

The cylinders are changing in two dimensions. Height remains the same. The diameter is increasing consistently.

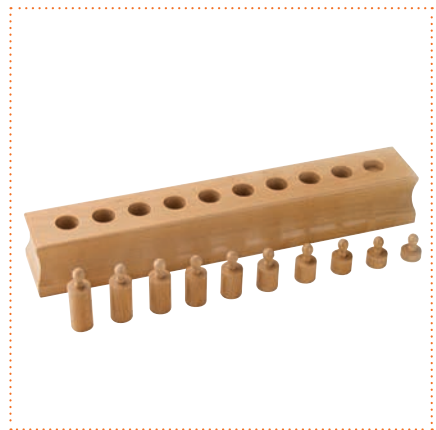
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130144 Cylinder Block 3

The cylinders are changing in three dimensions. Height is decreasing consistently, the diameter is increasing consistently. (in the opposite direction)

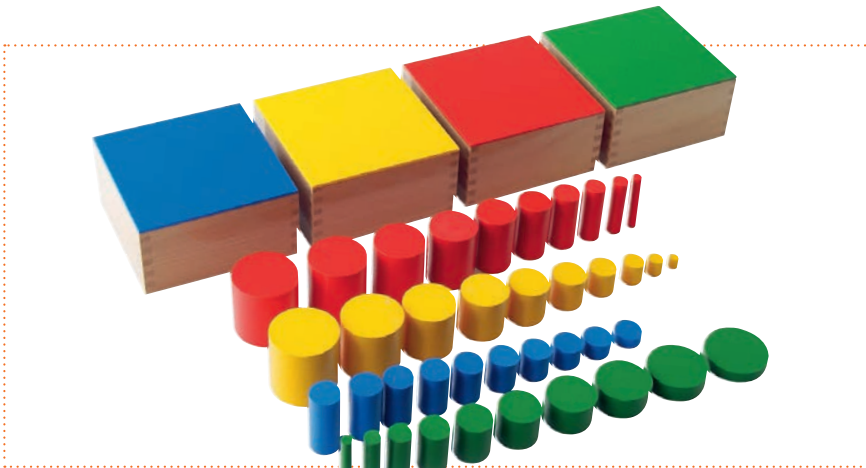
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130145 Cylinder Block 4

The cylinders are changing in one dimension. The diameter remains the same on all cylinders, the height is increasing consistently.

Warning. Not suitable for children under 3 years. Small parts. Choking risk.



130146 Knobless Cylinders

4 sets, each containing 10 cylinders, which are varying in height and/or diameter depending on the set. The children are sensitized to dimensional differences by repeated sorting and combining. Each set comes in a wooden box with matching cover: red, green, yellow, blue. Each set contains a replacement for the smallest cylinder.

Dimensions: cylinder Ø 1 – 5 cm, height 1 – 5 cm, box 13.5 x 13.5 x 7 cm.

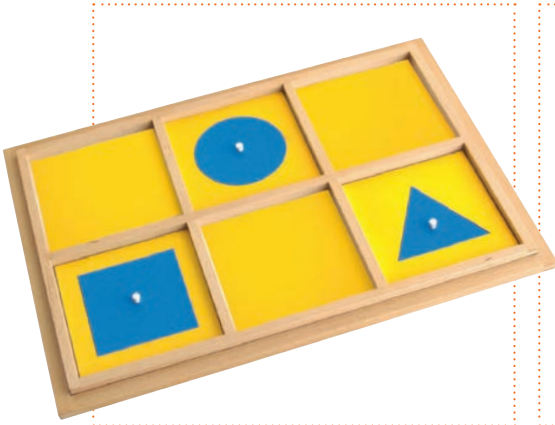
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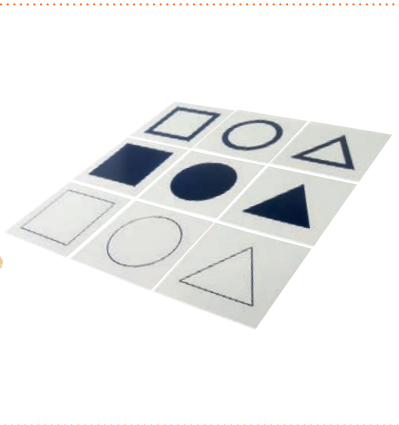
130285 Sensorial Replacement Kit 1

The set contains 2 each of the following replacement parts: The smallest insert cylinder, the smallest colored cylinder and the smallest cube of the pink tower.

Warning. Not suitable for children under 3 years. Small parts. Choking risk.



130199 Geometric Demonstration Tray
With inserts to introduce the basic geometric shapes of circle, square and triangle.



130235 Cards for geometric demonstration tray
3 sets with 9 cards each matching the shapes of the geometric frame.



130238 Geometric Form Cards Cabinet
Has 3 shelves for sorting the geometric cards.
Material: Birch plywood.



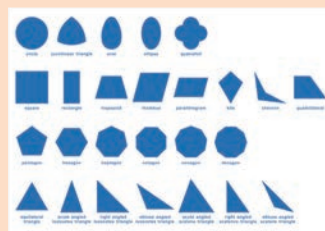
130246 Geometric Cabinet Nomenclature Cards
The respective names of geometric shapes shall be found.
The set contains: 26 cards with geometric shapes, 26 name tags



Geometric Chest of Drawers



130237 Deck of Cards for the Geometric Chest of Drawers
3 series with 35 cards each matching the shapes of the geometric chest of drawers: The shapes are shown in three different designs, with thin border, with thick border and completely filled.



130239 Geometric Cabinet Control Cards
Material: Polypropylen.



130236 Geometric Cabinet
Sturdy wooden box with 6 removable drawers, contents: 35 inserts and frames: 6 circles, 6 rectangles, 7 triangles, 6 regular polygons, 4 curvilinear shapes, 6 general rectangles and one empty frame.

Material: wood.

Dimensions: Box 48 x 32 x 20 cm, drawer 44 x 30 x 3 cm, insertion frame 14 x 14 cm.



130274 Geometric Solids with Stands

The set contains massive blue wooden models, which can be used to train the recognition and naming of basic geometric bodies.

Contents: Cylinder, cube, ellipsoid, egg, sphere. Four-sided and three-sided pyramid, conic body, triangular prism and cuboid as well as 3 transparent plastic stands.

Dimensions for comparison: Cuboid 8 x 4 x 4 cm.



130275 Geometric Plane Figures with Box

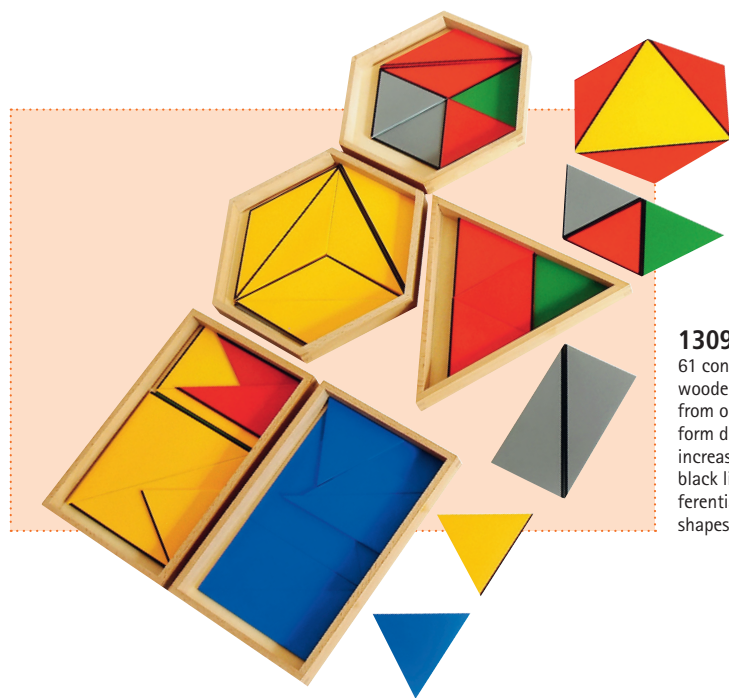
5 wooden base areas for geometric shapes. The children can match the base areas with the full bodies. In doing so, it becomes clear by turning that a body may have several base areas that may differ from each other. Furthermore, the children can also compare the base and/or side areas of several bodies.

Dimensions for comparison: Cuboid 8 x 4 cm.



130248 Constructive Blue Triangles

With the 12 right-angled, scalene triangles, the children can form new geometric shapes by sliding and turning. This way, the children get an idea of geometric connections, such as symmetric features and the measuring of angles.



130962 Constructive Triangles in Five Boxes

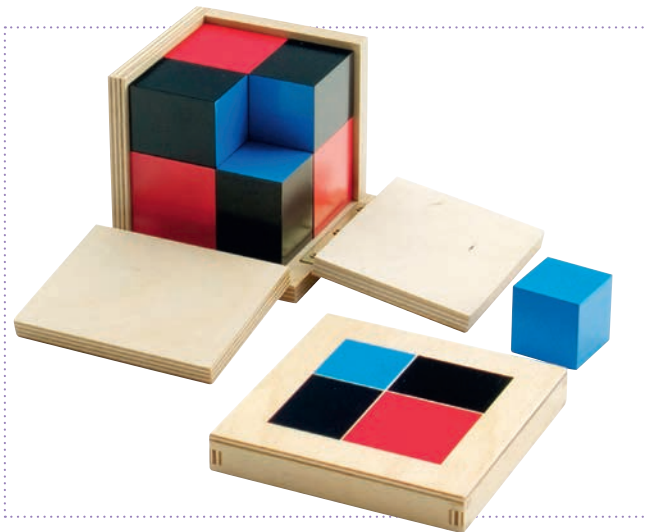
61 constructive triangles of differing shapes and sizes in five colors, stored in 5 little wooden bins (rectangular, triangular, hexangular). The children can sort the triangles from one bin by color, size or shape and lay them out to one another, in order to form different shapes. By adding the triangles from another bin, the difficulty is increased. Most of the colored triangles (except the blue ones) have one or several black lines, which are very helpful when laying shapes. Now, the children can differentiate between shapes of the same content and the same form and find other shapes by sliding or turning over individual triangles.



130284 Circles, Squares and Triangles

With this material, which is suited for many different activities, the children are introduced to the 3 respective basic geometric shapes in a completely playful manner. The 3 wooden bins with lid contain circles, triangles and squares in 3 colors and in increasing size from 1 - 10 cm.

Warning: Not suitable for children under 3 years. Small parts. Choking risk.



130276 Binomial Cube

The binomial cube is a bipartite cube consisting of 8 individual cubes, also binomial $(4+3)^2$ or in more general terms, $(a+b)^2$. During assembly, the child starts with the biggest cube and obtains the complete cube by joining identically colored areas. This way, the child can get an insight into the three-dimensionality. Later, the volume of the individual blocks can be calculated. In a wooden box with lid.

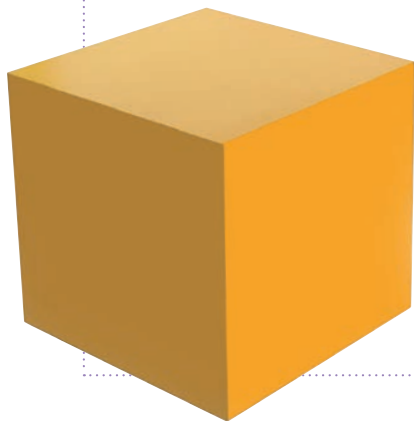
Warning. Not suitable for children under 3 years. Small parts. Choking risk.



130464 Trinomial Cube

As far as the setup is concerned, this cube corresponds to the binomial cube, with the difference that it is tripartite, i.e. trinomial $(4+2+3)^2$ or in more general terms, $(a+b+c)^2$. Due to the higher number of individual blocks, the assembly is more challenging and more calculations can be performed. Contents: 27 colored wooden cubes in wooden box with lid.

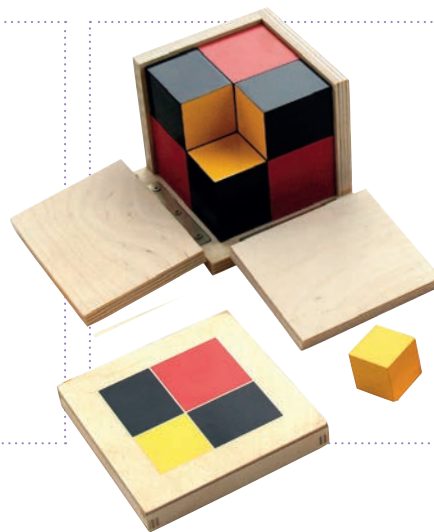
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130468 Yellow Cube

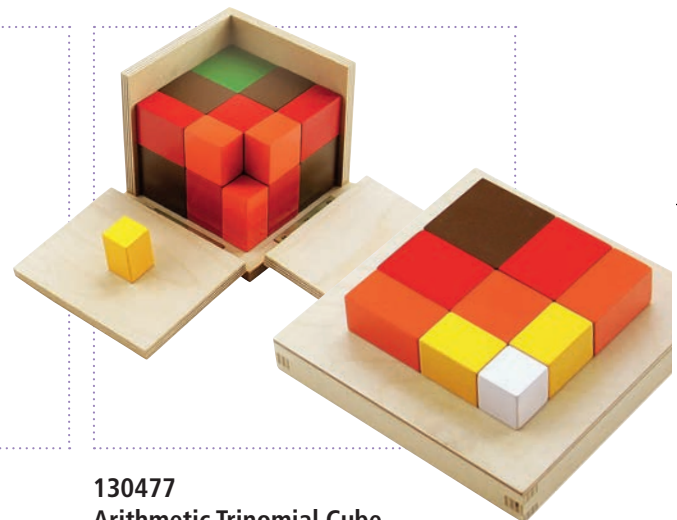
This cube clarifies the increase of volume from the second power to the cube. Made of wood.

Dimensions: 27 x 27 x 27 cm.



130469 Algebraic Binomial Cube

Corresponds to the binomial cube, however, the color design is different.



130477

Arithmetic Trinomial Cube

In principal, it corresponds to the trinomial cube; however, the color design is different. With advanced exercises, the different side lengths represent also different place values, so that a wide variety of problems unfolds.

Warning. Not suitable for children under 3 years. Small parts. Choking risk.

- A** **130466 Power of 2 Cube**
(7 wooden blocks: 3 x yellow, 2 x green, 2 x white)
With this cube, the exponential increase in size of powers is demonstrated. The wooden box can be swung open on two sides to show the wooden blocks.

Warning. Not suitable for children under 3 years. Small parts. Choking risk.

- B** **130467 Power of 3 Cube** (13 wooden blocks:
5 x yellow, 2 x green, 2 x white)
With this cube, the exponential increase in size of powers is demonstrated. The wooden box can be swung open on two sides to show the wooden blocks.

Warning. Not suitable for children under 3 years. Small parts. Choking risk.

