

## Description of the Exhibits in the Exhibition

(All exhibits are made by 'Mathematikum' in Giessen, Germany

<https://www.mathematikum.de/>)

The objects described below were used for all exhibitions:

---

### The Bridge

A bridge is to be built from the parts. This is similar to the Leonardo Bridge, only four bars are firmly connected to each other.



---

### What are you feeling?

With your hands you feel ten different objects.  
Can you feel something round or something angular?  
The pictures must be assigned to the felt objects.



---

### The Ghost Puzzle

With the ghosts you can cover the area without any gaps - a different kind of parquet.





---

### Paint in the Mirror

Draw a figure or write your own name:  
actually quite simple -  
but not if you can only look in the mirror..



---

### The Puzzle Table

This table is a combination of six different  
puzzle games: cross or square, cube from two  
parts, cube from three parts, ball pyramid,  
square puzzle and triangle.



---

### The Puzzle Table - Cross or Square?

With the five parts you can either lay out the  
cross or the square.



---

### The Puzzle Table - Cube made of two parts

You can assemble a cube from the two parts.



---

**The Puzzle Table -  
Cube made of three parts**

You can build a cube from the three pyramids.



---

**The Puzzle Table - Spherical Pyramid**

You can build a spherical pyramid from the three parts.



---

**The Puzzle Table - Triangle**  
The three equal parts put together form a triangle.

The yellow bar serves as a guide for the size of the triangle.



---

**The Puzzle Table - The Square Puzzle**



---

### The Ball Tracks

Two ball tracks - one blue and one red. The red path contains an arch, so the route is longer. Two balls are racing. The ball on the red track wins. Why?.



---

### The Hedgehog Wheels

Three tracks that have differently arranged holes and three wheels that are also different. Only the right wheels roll along the tracks on their own.



---

### The Labyrinth

A round labyrinth with an entrance and an exit - and there is only one way through.



---

### The Soap Skins

Different metal frames can be immersed in soapy water. The result is beautiful soap skins - minimal areas that one would not have expected.





---

### The Giant Soap Skin

If you pull on a rope, you will be enveloped in a beautiful soap tunnel. First, the tunnel has the shape of a tube, but soon he gets an ever smaller waist, until it finally touches the visitors and burst.



---

### The Mirror House

If you crawl into the mirror house, you will see yourself mirrored infinitely from different directions.



---

### Lots of Ducks

All ducklings have to find a place in the waves. Each color may only be used once per wave..



---

### We're Building a City

You can recreate the shadow wall with different building blocks. Little by little, a city with houses, towers and churches emerges.



---

### The Number Circle

Twelve round holes are arranged in a circle. Behind every pane of glass under a number there is something - what does what you see have to do with the respective number?



---

### The Gears

A starting wheel with a crank and a wheel at the end with an optical illusion are firmly screwed to the magnet wall. The other gears should now be attached so that the last wheel turns. Does it make a difference in which direction you turn the first wheel?

