

Počítače nedokáží pracovat  
velmi jednoduchým jazykem.  
Nejjednodušší forma in

**ANO / NE**

Počítače umí tedy pracovat  
Pokud chceme tímto způsobem  
v desítkové soustavě, mu

**1 bit**

**JAK ZAKÓDOVAT S**

V expozituru binární POČÍTADLO jsme ti ukázali  
dvéjčkové a naopak. Co však máme udělat,  
zjistuje mezinárodní tabulka ASCII (zkratka "Am  
i každému jinému znaku na klávesnici) číslo,  
přičemž čísla od 0 do 255.



AMERICAN



STANDARD

Symbol	ASCII code	BIN code	Symbol
space	032	00100000	@
!	033	00100001	A
"	034	00100010	B
#	035	00100011	C
\$	036	00100100	D
%	037	00100101	E
&	038	00100110	F
'	039	00100111	G
(	040	00101000	H
)	041	00101001	I
*	042	00101010	J
+	043	00101011	K
,	044	00101100	L
;	045	00101101	M
?	046	00101110	N
/	047	00101111	O
0	048	00110000	P
1	049	00110001	Q
2	050	00110010	R
3	051	00110011	S
4	052	00110100	T
5	053	00110101	U
6	054	00110110	V
7	055	00110111	W
8	056	00111000	X
9	057	00111001	Y
:	058	00111010	Z
;	059	00111011	[
<	060	00111100	\
=	061	00111101	]
^	062	00111110	^

Chceš vidět víc?  
Do you want to see more?  
Viláš du mély viláš?  
Chcesz zobaczyć więcej?

Exhibition focused on demonstrating  
the practical use of mathematics

# MATEMATIKUM

part of the modern science and entertainment center IQLANDIA in Liberec

# MATEMATIKUM EXHIBITION

We present to you 'MatematikuUm,' a unique exhibition that is part of the largest science center in the Czech Republic, IQLANDIA, aimed at popularizing mathematics. Our goal was to present mathematics from a new, attractive perspective and to design an innovative environment that allows young people to discover mathematical principles through interactive experiences and practical demonstrations.

Drawing on our experience from previous projects (Technical Museum Košice, Science Experience Center Aurelium Bratislava), expert knowledge, and creative approach, we succeeded in creating an exhibition that fosters the interest of children and youth in mathematics.

The exhibition is primarily designed for elementary school students (6th to 9th grade), but it also provides plenty of challenges for older visitors who want to test their thinking skills.

The exhibition is carefully divided into several thematic sections, allowing each visitor to find something that captures their interest. Nature, history, architecture, art, and modern technology—mathematics accompanies us at every step, and we have transformed it into an interactive world full of challenges.

**Mathematics in Nature**

**Mathematics in Construction**

**History of Mathematics**

**Mathematics in IT**

**Mathematics in Everyday Life**

**Statistics**



© IQLANDIA, o. p. s.



© IQLANDIA, o. p. s.



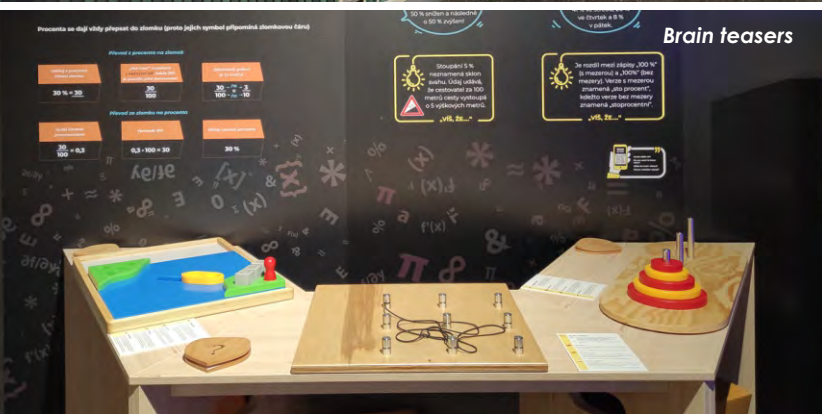
Encryption



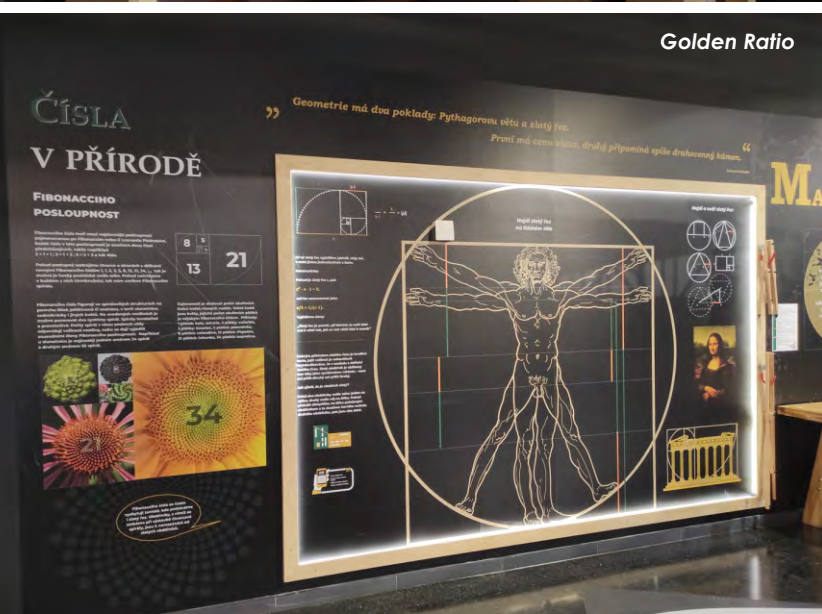
Fractal Tree



Brain teasers



Golden Ratio



Archimedes' Notebook



Jaká je za tím matematická?

Všechna závaží mají stejnou hmotnost. Pohyb závaží po pulích mění jejich hmotnost uvidených čísel, takže různé hodnoty je možné vyšší posunutím závaží doleva nebo doprava.

Jaká je hmotnost neznámého závaží?



© IQLANDIA, o. p. s.

# MATEMATIKUM

This project was created for:



Watch the video of the MatematikUm exhibition  
opening on our YouTube channel:



# KVANT<sup>®</sup>

**KVANT spol. s r.o.**  
FMFI UK Mlynská dolina, 842 48 Bratislava, SLOVENSKO  
Tel.: +421 2 6541 1344  
e-mail: kvant@kvant.sk, www.kvant.sk  
[www.sciencemodels.info](http://www.sciencemodels.info)