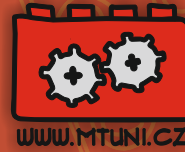


lesson 13: Water Management Experts
+ lesson 14: Experiments with Water

- 📷 children talk about ways of drainage and filtration
- 📷 they build a simple model of a sewage disposal plant
- 📷 they perform a simple experiment to clean dirty water



DEVELOPED AND LICENSED BY:

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lesson 15: Power Engineers
+ lesson 16: Power Plants

- 📷 children learn about electric power and wiring, what it is used for and what would happen if we suddenly don't have it
- 📷 they find out how electricity gets produced and build a simple model power plant
- 📷 with the help of a blueprint they construct the electricity distribution system

lesson 17: Little Oil Miners
+ lesson 18: Little Gas Miners

- 📷 children learn about oil and discover all the things around us, that are made of it
- 📷 they find out, where and how is the oil and natural gas extracted and how it is processed after extraction
- 📷 they learn, why the gas smells and bring the gas line to their house

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STEMKIDS ACADEMY



Curious Minds, Capable Kids



LESSONS FOR PRESCHOOLS AND ELEMENTARY SCHOOLS

**PLAYFUL EDUCATIONAL LESSONS
THAT WILL ENRICH YOUR DAY**

- 📷 extending children's logical and technical capabilities by using a hands on approach
- 📷 role-playing - play architects, electricians, plumbers, tower and bridge constructors, city builders, cartographers, energy suppliers and waste managers
- 📷 created by teachers, engineers and architects
- 📷 recommended by child psychologists and special education teachers
- 📷 suitable for children of age 4 – 8
- 📷 one lesson takes 60 - 90 minutes

● **lesson 1: City Planners** **+ lesson 2: Building Own City**

- 📅 children talk about buildings and cities
- 📅 they build their own city around the streets
- 📅 they build important public buildings (hospital, city hall, church, police station, fire station, theatre etc.)
- 📅 they role play cartographers and draw a city plan with all the buildings



● **lesson 3: Architects** **+ lesson 4: Building Own House**

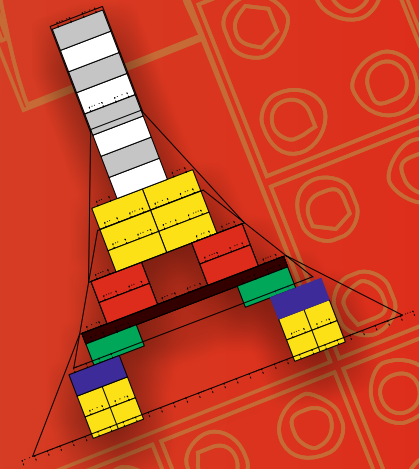
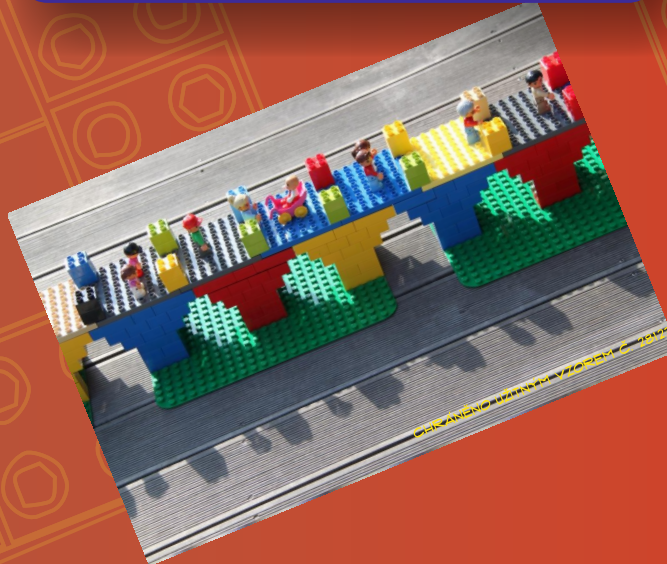
- 📅 children get a simple house blueprint
- they learn how to read it (find out where the kitchen, restroom, door, windows etc. are),
- 📅 what are the weight bearing and partition walls
- 📅 we introduce the architect and planner professions
- 📅 based on the blueprints they build a building foundation with all the rooms

● **lesson 5: Electricians and Plumbers** **+ lesson 6: Utilities Distribution System**

- 📅 based on a simple blueprint children install water pipes, electrical wiring and drains to their house
- 📅 they identify these distribution systems by the colors
- 📅 we introduce the electrician and plumber professions
- 📅 they light up a real bulb in the house

● **lesson 7: Municipal Engineers** **+ lesson 8: My City and its Distribution System**

- 📅 children learn how the distribution systems (water pipes, electrical wiring and drains) are constructed outside the houses to connect with the city systems
- 📅 based on a plan they install the street distribution systems
- 📅 they light up the street lamps



● **lesson 9: Bridge Builders** **+ lesson 10: Sink or Float**

- 📅 children learn how to build bridge pillars
- 📅 they construct it using a detailed guide
- 📅 together they build a bridge that they can actually walk across

● **lesson 11: Tower Builders** **+ lesson 12: Building a Paper Tower**

- 📅 children talk about different kinds of towers (lighthouses, sightseeing and TV towers, etc.)
- 📅 they learn about their purpose
- 📅 they learn how to build a stable tower and how to prevent it from falling
- 📅 based on a plan they build a model tower