



## Alignment with the Didactical Model

### Integration of Disciplines

This activity makes children learn new topics from

Experimental Science	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social Science	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Technology&Engineering	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Art	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mathematics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How do you think all STEAM disciplines integrate in this activity?

- Some subjects are missing from the activity (Level 0)
- All subjects can be addressed independently (Level 1)
- Each subject is needed to reach the final goals (Level 2)
- Children need to make connections between subjects (Level 3)
- Boundaries between subjects vanish often (Level 4)

### Integration of Children

Children collaborate with others (collaborative-learning)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Children need one-another to carry out the activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The grouping recommended in the guide is adequate for the tasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Groups are not competing against each other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Students reflect on their team's work and on their own performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Body & Mind integration

There is a good hands-on brains-on balance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Children discover new knowledge by experimenting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hands-on work provokes critical thinking and on-topic discussions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Methodological Process

The problem is "realistic" (from the children's perspective)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Students explore real-world problems using Project-based learning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The learning process involves students actively	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Children discover new knowledge by themselves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The motivational context is enough to get children's attention	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Students gain knowledge and skills solving an authentic problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The project allows students to cover part of the mandatory curriculum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Process Orchestration

Children interact with their teacher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The teacher mainly acts as a coach	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The Useful Questions' section provoke deepful thinking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The teacher has a clear view of his/her goals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The activity promotes self-management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teachers can handle the time requirements in the schedule	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The suggested formative assessment encourages the learning process	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



### Computational Thinking Skills developed

Data collection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Data analysis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Data representation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Problem decomposition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pattern Recognition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Debugging	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Abstraction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Algorithms and procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Automation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Simulation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parallelization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Generalization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Levels of Knowledge & Knowledge Transfer

Children will be able to apply the CT skills they learn:

- Only if CT is presented without context (e.g. look for this pattern)
- Only in the same situation (e.g given some data, look again for a pattern)
- If we make a reference to the activity (e.g. given some similar data)
- In general contexts (e.g. instinctively use the "look for patterns" strategy)
- In an abstract setting (e.g. Deeply understand Pattern Recognition)

### Adaptation to different contexts/settings and Countries

- The project can be adapted to the Country, school, group, each child
- The project can be aligned with your national curriculum
- The project gets the most out of the ICT resources you have available