

Natalija Stocka & Josifs Spirts | Jelgava Secondary school No 5 | Jelgava | Latvia

What is in the Black Box?

The Black Box problem to foster exploratory interest in primary school students



The Black Box offers opportunities to implement the inquiry based learning in primary school STEM subjects (mathematics, engineering, natural sciences, etc.).

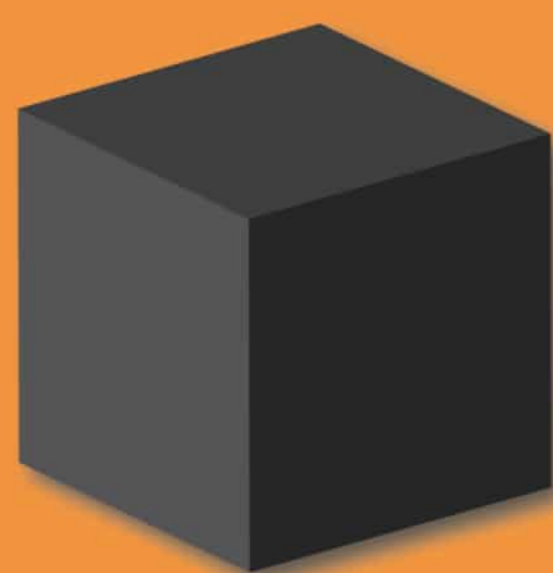
Intriguing students with its “mysteriousness”, the principle of black box tasks is as follows:

- we have some unknown system,
- we try to understand its internal structure by performing different actions and receiving the information provided by the black box.

Actions with the box can be repeated or changed to refine the known information and learn what is hidden under the hood.

Hypothesis

- ✓ The sun
- ✓ prprprpr
- ✓ 111
- ✓ Education
- ✓ the Sun
- ✓ Black Box



Conclusion

- ✓ 5
- ✓ 8
- ✗ No answer
- ✓ 9
- ✓ 6
- ✗



The Black Box tasks develop thinking; they include all the steps of research activity; the information presented in this way improves the skills of analysis, synthesis, problem solving and critical thinking.