Route Finding

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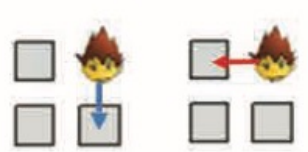
Activity from

Chapter 2, Task 2.4

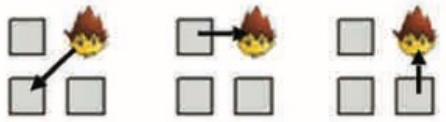
2.4 Route Finding

Task 1

› Romy can only jump to the nearest tiles below (blue line) or to the left (red line) and both of them are called "one step."



› He is not allowed to jump cross-wise (black line) and back to the previous position (black lines).



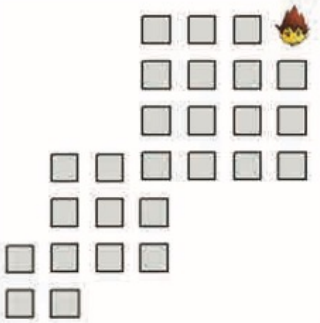
› On the tiles on the right, he would like to get one gold medal.
- How many possible routes does he have?
- How do you explain it to your friends through the telephone?
- How many steps does he need?

› In the case of the right tiles,
- How many routes does he have and how many steps does he need to get a gold medal?
- How do you explain it to your friends by using telephone?

How can we represent the route?
- By using trajectory, by using the words, or by using colour.
- What do you count?
- By using the number of steps or by using the number of routes.

Task 2

› Let's pose the questions to your friends by using the right tiles.



Task 3

› Let's create your own game boards by setting the rules by yourself and enjoy it with your friends.

Let's explain the learning objective of these activities by using the following words:
- Explain the route by using the given rules through changing representations.
- Generalisation, specialisation, and inductive reasoning to find the pattern.
- Mathematisation for addition and multiplication: Finding algorism, what if and what if not for creating something new.

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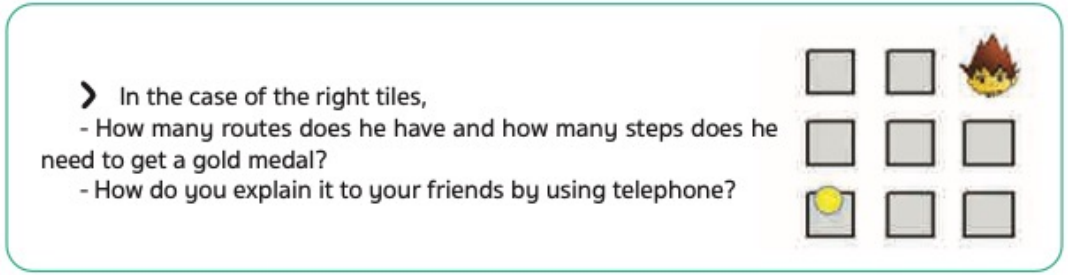

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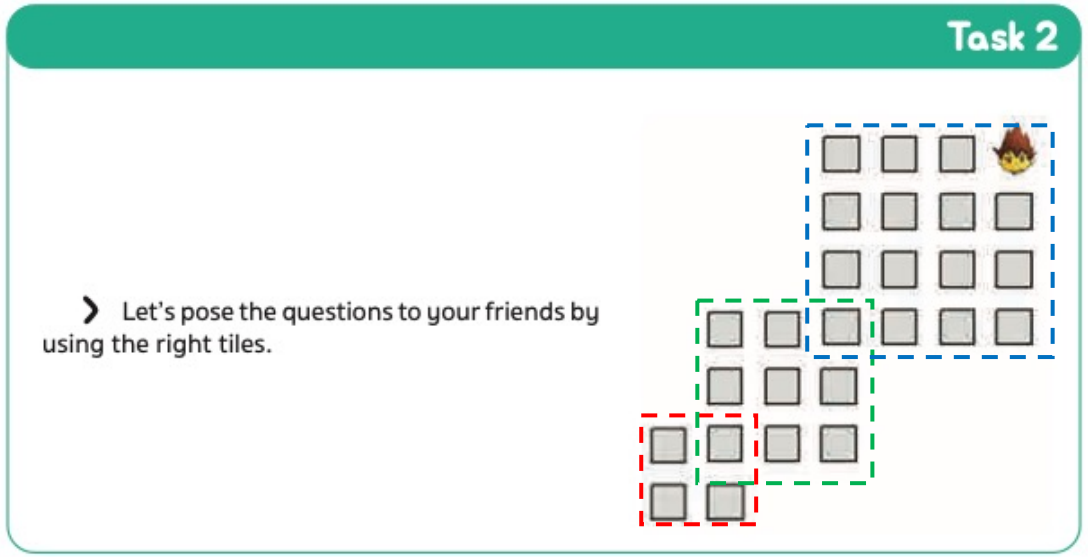

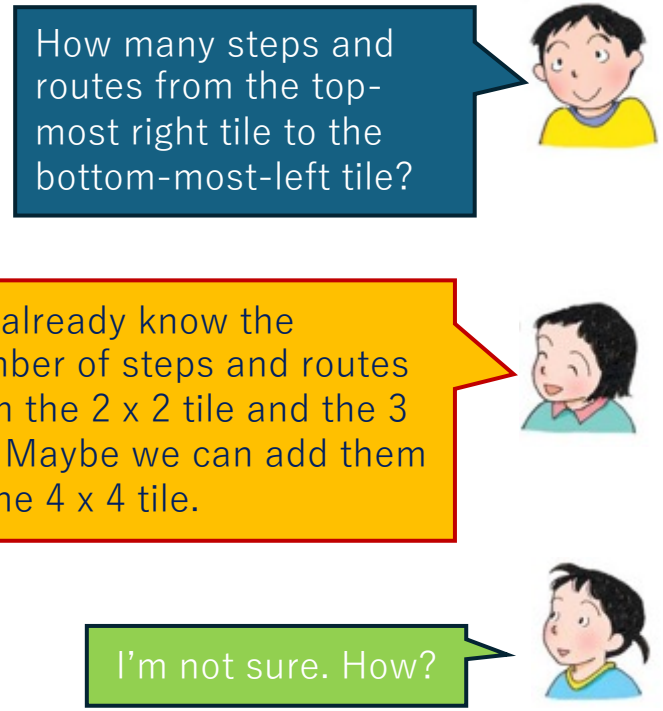

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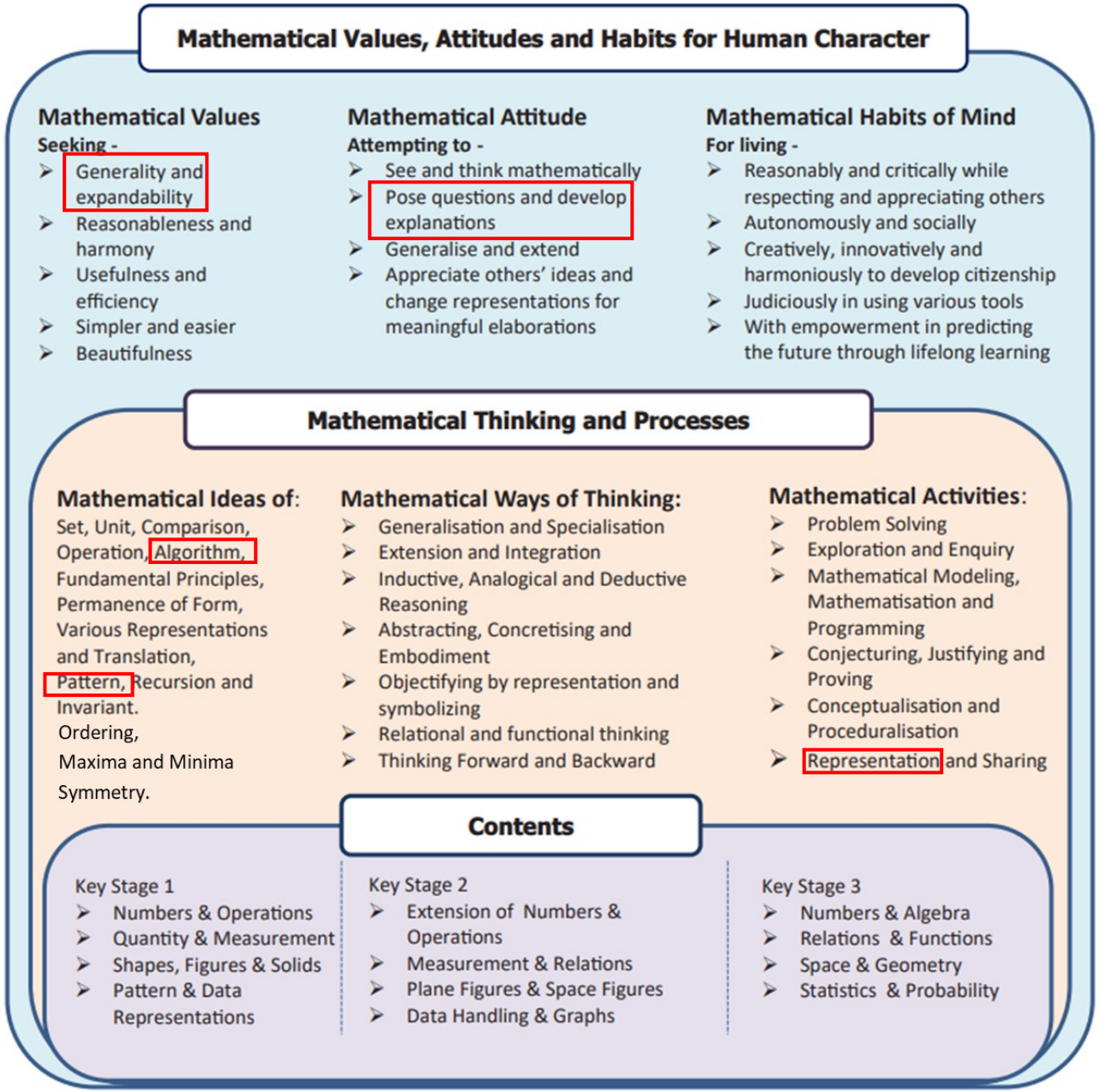

Figure 1. Revised CCRLS Framework in Mathematics

Generalizability and Expandability

Pose questions and develop explanations

Algorithm (systematic)

Pattern

Representation