DIE KURVE ABSCHWÄCHEN

Quelle: https://de.wikipedia.org/wiki/Datei:Covid-19-curves-graphic-social-v3-de.gif
Siouxsie Wiles and Toby Morris

Covid-19 Special

- comprehend and understand -

Flattening part 1

Task from 8 April

How can the curve be flattened?

In the previous task you saw how big the difference in the number of infected people is, when you you're your lifeas known before the pandemic compared to when you live with all the restrictions. Even if it is difficult, it makes sense that grandparents and friends cannot be visited at the moment. Now the question arises: How long will this go on? Unfortunately nobody can answer this question at the moment. However, the virologist (i.e. an expert) Christian Drosten says that the curve of Covid-19 new infections must be flattened. But which curve is being considered exactly? And what does "flattening" mean?
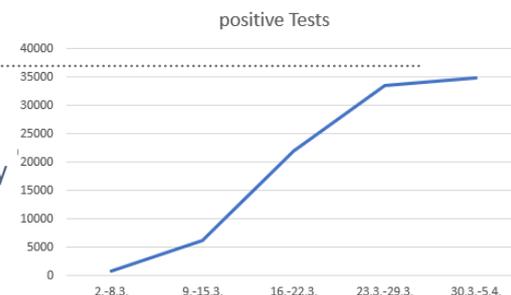
Infobox

Which curve is to be flattened can be understood by going to the website of the Robert Koch Institute (for the web address see references). There you can see graphs in the lower right corner. If you click on "Cases cumulated", you will have the number of people who have been infected for each day. These are the ones that have been considered in our tasks so far. Imagine riding your bike on this curve from left to right. Between the middle and end of March the curve is steeper. Now, at the beginning of April, it is flatter. But it is much easier to recognize the flattening of the curve by the "cases/day" (cases per day). What the cases/day are, you will find out in the task.

Comprehend and understand

Try to understand, how the curve for the cases per day looks like in the time in which the number of the demonstrably infected persons doubles every three days. For this, use the chessboard from task 1.

1) Lay out the rice grains in the first row of the chessboard in the same way as in "Task 1: Spreading".
2) In the second row, you now count the increase in rice grains in the front row. An example is in the machining instructions (see notes). What do you find when you compare the two rows?

positive Tests

Because the number of positive tests varies greatly within a week (see page of the Robert Koch-Institute "cases/day"[1]), you can find the chart with cases/week (cases per week) to the right of "Comprehend and understand". This corresponds approximately to looking at every second square of the second row on your chessboard. In contrast to the chessboard, where the numbers increase more and more, you see a clear flattening in the diagram. Especially in the week before last to last week, the number of positive tests did not multiply, but remained almost the same.