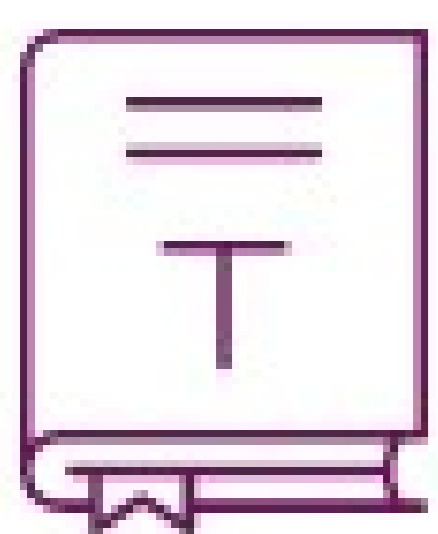




Context

Students with special learning needs may have a variety of difficulties in learning mathematics. For example, abstraction, logic, visual-spatial skills, fine motor skills... are all abilities that may be lacking for these students. Thus, to counter these difficulties, it is sometimes interesting to use computer software to reinforce certain skills or to compensate for difficulties.



Presentation

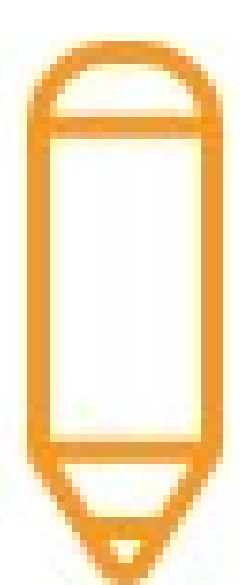
Some software allow us to :

- Reinforce deficient skills:

The computer tool allows us to motivate students, to have oral and written instructions, to have illustrated and adapted feedback... these complementary means to traditional teaching are beneficial for all students, especially those with specific learning difficulties.

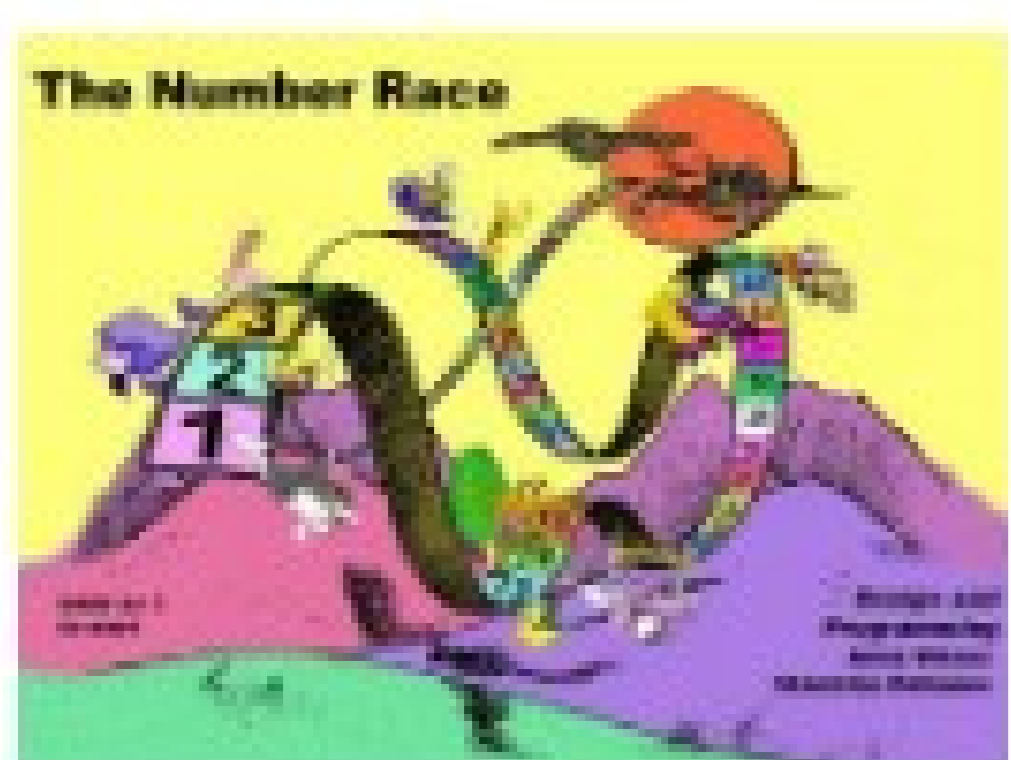
- Compensate for skills:

In some cases, students need to be helped by certain software or tools to overcome certain persistent difficulties: calculating, drawing geometrical lines, applying procedures, etc...



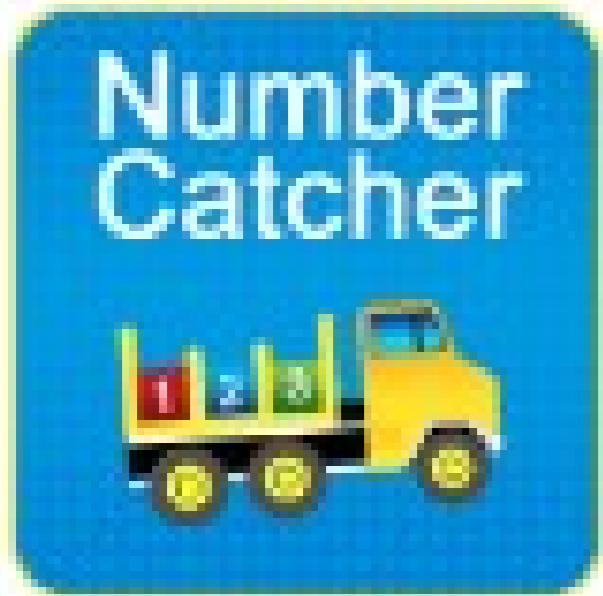
Software to help in mathematics: practices and examples

Software to reinforce deficient skills :



The number race

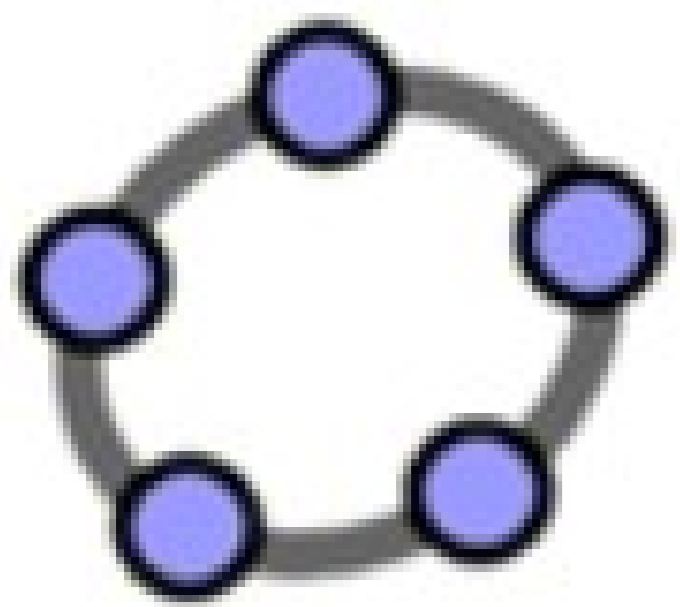
- Scientifically designed to teach math skills to students aged 4-8.
- Created by experts to accommodate students with special learning needs.
- Fun computer game to play with numbers, while training basic number and arithmetic concepts. Number formats: concrete sets, digits and number words Counting: practice numbers from 1 to 40.



The number catcher

- Scientifically designed to teach math skills to learners aged 5-10.
- Created by experts to accommodate students with special learning needs.
- Basic math skills: addition and subtraction.
- Number formats: concrete sets, digits and number words.
- Base 10 principle and multi-digit number logic.

Software to compensate deficient skills :



Geogebra

- GeoGebra is a dynamic mathematical software program.
- It is made for every level of education, from beginner to expert.
- This app combines geometry, algebra, spreadsheets, graphs, statistics and analysis, calculus in one user-friendly package.



Photomath

- This app will help you understand mathematical problems with content to improve your math skills.
- By scanning your math problem, this app will help you instantly with solving it.
- You can do this by using the camera on your mobile device. After it found out what your math problem is, the app gives you a step-by-step explanation.
- Photomath explains you the calculation steps with animations just like a teacher would do, in real life.



Resources

Software to support mathematics learning for students with special needs :

- <https://www.bookwidgets.com/blog/2019/02/how-these-20-math-tools-can-make-your-lessons-more-exciting>
- <https://www.dyscalculia.org/math-tools>