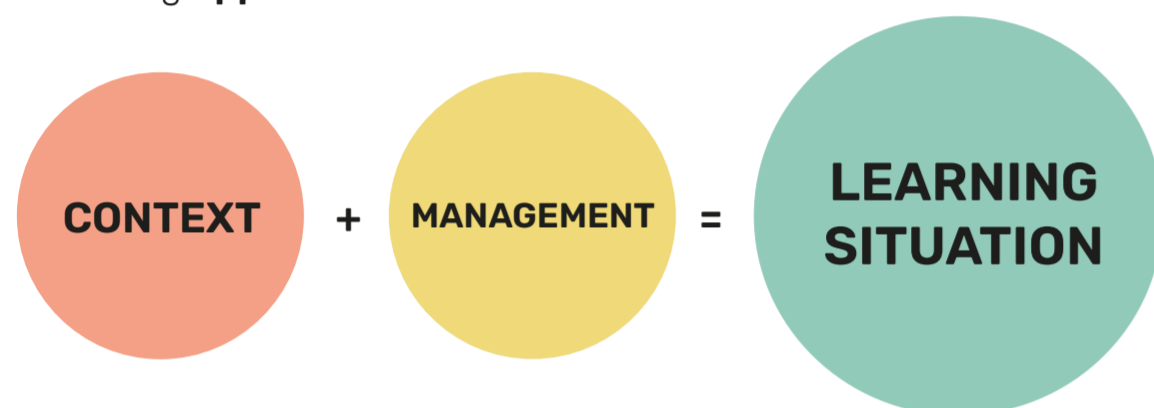


How to generate mathematical learning situations?

Learning situations are questions, situations, problems or activities that are important for students and allow us to develop their competencies.

In other words, they are situations that generate learning **opportunities**.

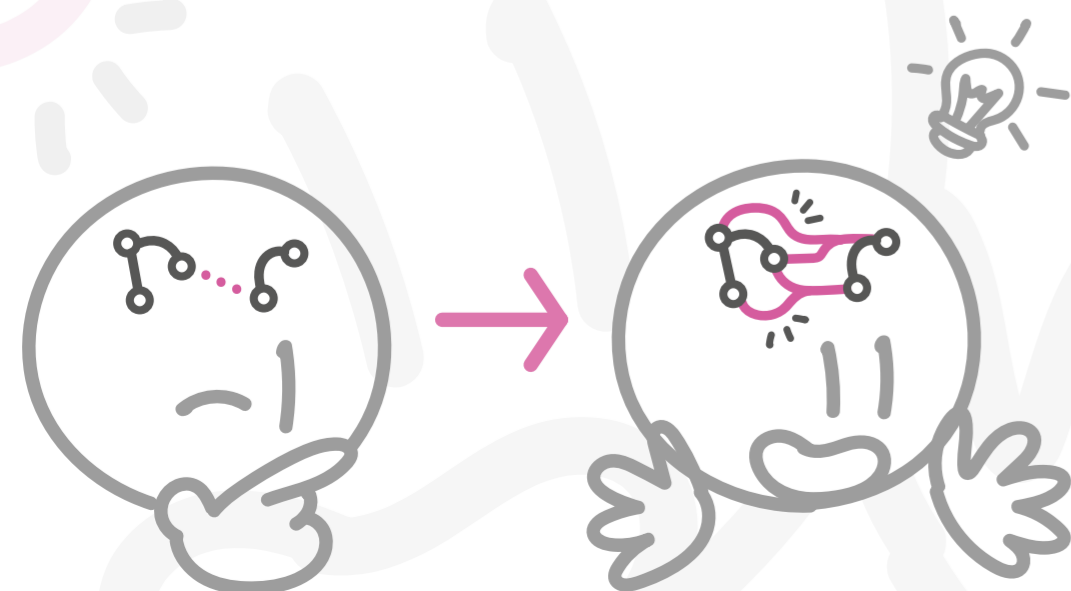


The work of teachers is essential in student's experiencing meaningful and competent learning. But we cannot base everything on resources or tasks, there is no magic recipe! The teacher's **understanding** and **management** of a class is key in students connecting and engaging with what is happening in the classroom.

And this idea can be applied to any of our classes, to any subject even. We show the students examples of how we can generate opportunities in a variety of contexts, whether they are working on projects, doing enriching activities or performing a specific systematic task.

CLASSROOM METHODOLOGIES

OR CONTEXTS



PROJECT WORK

The aim is to involve students in interdisciplinary activities that pursue an objective which enhances individual skills and encourages developing them in group-based situations. Motivating our students to discover things for themselves is key to this so that they learn in a meaningful way.

Example: Study the flight of a paper airplane.



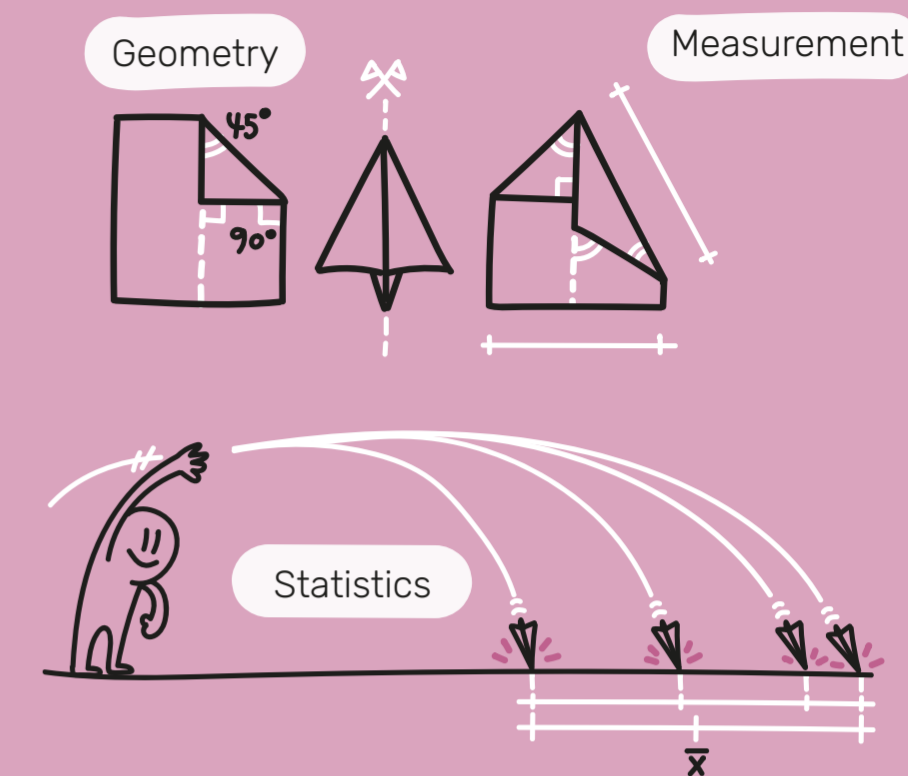
Macro focus

This refers to the design of the activity as a whole. It is the complete picture of what we bring to the classroom, which is intended to generate learning.



Micro focus

It is our management of the situation, the questions we ask at any given moment to generate more opportunities for meaningful learning.



WELL-ROUNDED ACTIVITIES

Set tasks that have a *low floor, high ceiling and wide walls*. Students should be able to achieve the main objective of the activity and, in addition, explore connections to other content and raise new questions to go further.

Example: Fractions.



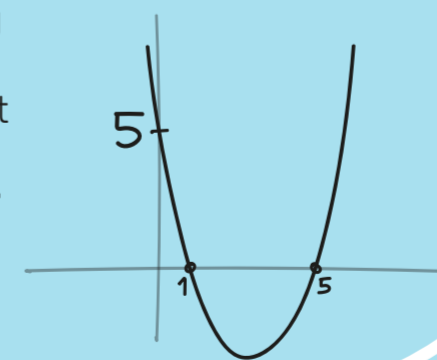
EXERCISES AND SPECIFIC QUESTIONS

These are very specific tasks that require the application of consolidated content and processes. Exercises and questions allow us to practice and improve math skills, understand and consolidate concepts and develop fluency.

Example: "Find the points of intersection of this equation".

You must be willing to generalize and work on the content of a particular exercise in a **wider** context.

$$x^2 - 6x + 5 = 0$$



What if we change the parameter n ?

$$\begin{cases} x^2 - 6x + 4 = 0 \\ x^2 - 6x + "n" = 0 \end{cases}$$

