FROM TEACHERS FOR TEACHERS

TECHNOLOGIES IN STEM EDUCATION

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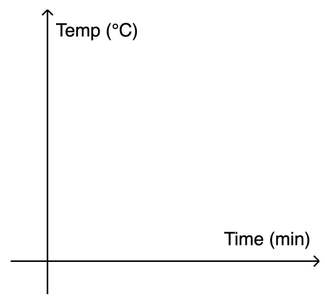
Graphing stories

A graphing story is a classroom routine that develops secondary school students' knowledge of graphs, functions and mathematical models.

How?

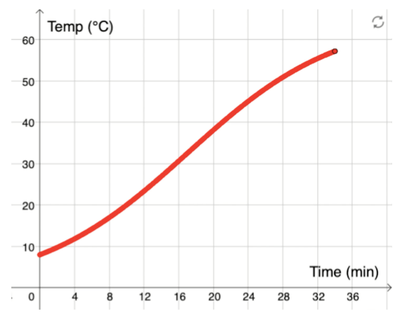
1. Students see a **short film** of an everyday event, such as a glass filling with water, a piece of salmon cooking in the oven, or a swing moving back and forth.

2. The students **draw a graph** to describe the event, e.g. how they think the height of the water, the temperature of the salmon or the speed of the swing changes with time.



3. In the ensuing discussion of the students' graphs, there is a natural need to **introduce mathematical concepts** such as *slope* and *y-intercept*, and to name the graphs as *linear*, *periodic*, *exponential* etc.

4. Each film ends with the **correct graph** being shown. The correct graph is then compared with the students' graphs. How are they similar? How are they different?



Why?

1. Graphing stories connect math to students' **everyday life**
2. The video format makes it easier for students to see the **connection** between the real-life event and the mathematical representation
3. Graphing stories provide a relevant context for **introducing new mathematical concepts**, such as *slope*, *maximum, linear*, *exponential* etc.
4. The graphing story routine can be **adjusted, varied and developed** to suit groups of students of different ages and abilities. To find out how, visit www.matemagi.com.

Read more and access resources at **www.matemagi.com**

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