

Optical illusions

Objectives:

- Understand the concept of perception
- Develop observation skills

STEP BY STEP

BEFORE STARTING

The teacher shows these images one at a time and asks the class to indicate what they see.

At this point, he introduces the concept of perception (the definition in the [glossary](#) can be used) and explains that this concept is closely linked to that of hazard. He then illustrates a situation in which a correct perception of the situation prevents a danger from becoming a disaster:

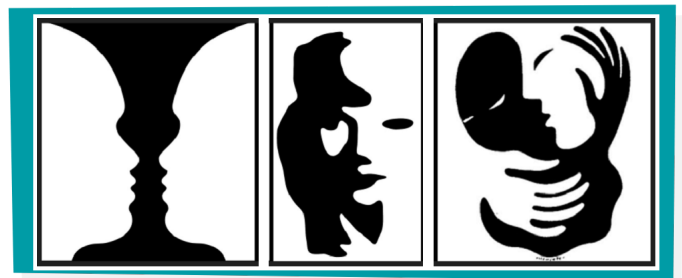
I am at home and I smell a strong smell of gas, I realise there may be a leak so I ask my parents where the main gas tap is at home, I close it and open the windows without turning on the light.

Perception - becoming aware of a reality one considers external thanks to sensory stimuli experienced firsthand, analysed and processed through intuitive processes that allow one to adapt one's behaviour.

The teacher asks the class to identify in the typical situation just illustrated

- the danger (gas leak)
- the sensory stimulus (smell of gas)
- the behaviour adopted as a result of the sensory experience (turning off the tap, opening the window, not turning on the light)

- the disaster that could have occurred if the perception had been wrong (explosion)



After collecting responses, the concept of **perception** is introduced, using the following definition:

Perception - becoming aware of a reality that is considered external due to sensory stimuli experienced firsthand, analyzed and processed through intuitive processes that allow one to adapt one's behavior.

The teacher explains that this concept is closely related to that of danger. To clarify the concept, the following scenario can be presented in which a correct perception of the situation prevents a danger from becoming a disaster:

I am at home and smell a strong gas smell, I understand that there may be a leak so I ask my parents where the main gas tap is at home, close it and open the windows without turning on the light.

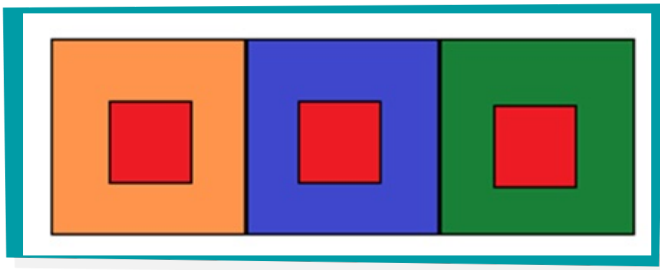
The teacher asks the class to identify the following elements in the scenario they just read:

- The danger (gas leak)
- The sensory stimulus (smell of gas)

- The behavior adopted as a result of the sensory experience (turning off the faucet, opening the window, not turning on the light)
- The disaster that could have occurred if the perception was wrong (explosion)

AT A GLANCE

The teacher shows a figure to the class in which three squares of different colours (orange, blue and green) are drawn with a red square inside each and asks the class to indicate whether the square inside each figure is the same shade of red or not (the class should see each red square of a different shade).



Ora l'insegnante copre la figura con un cartoncino bianco ritagliato al centro come fosse una mascherina, lasciando visibili solo i quadrati rossi al centro di ciascuna figura. A questo punto chiede nuovamente di osservare il colore rosso e se notano delle differenze di tonalità (in questa fase la classe dovrebbe vedere ora la stessa sfumatura di rosso).

CHANGE OF PERSPECTIVE

The teacher opens a small discussion with the class by asking what they think has changed between the first and second observation experience.

The teacher then gives an explanation of what happened: the perception of a colour can be influenced by the colour of the background. Certain colours can be emphasised by juxtaposing them with contrasting colours or be attenuated by very similar colours. Similarly, a dangerous situation can be 'less visible' if

one does not have the perception and knowledge of the 'background' and diminish the awareness that anyone can be in a dangerous situation and not know how to act.

Putting on the white mask helped to get an exact view of the red hue of the squares. Likewise, knowing the dangers to which one is exposed, the behaviour to adopt and disseminating this knowledge, helps one to 'see' the situation more clearly. This means having a correct perception of the risk and thus being able to act correctly.

CONCLUDING THOUGHTS

Do you know your environment well? Would you be able to leave the classroom with your eyes closed? With the help of the teacher, the class can test their perception of space.

