



MATH&MOVE

LESSON

USING MOVEMENT TO communicate with the semaphore alphabet



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This lesson focuses on communication and spelling out numbers using Semaphore alphabetic and numeric coding.

At the end of this lesson, pupils should be able to:



- Know how to code and decode numbers in letters using the Semaphore code.
- Use Semaphore alphabet movements with flags.
- Consolidate skills in writing numbers in letters.
- Improve coordination of movements.

TOPIC: Number recognition and comparison

DURATION: 10 - 30 mins

LEVEL: Ages 8-9

PARTICIPANTS: in pairs, small groups or whole class



LESSON

LESSON PREPARATION

Required skills

For this lesson, pupils should already:

- Identify the numbers from 0 to 10000 (depending on the level of the pupil).
- Write numbers in letters.
- Understand how to replicate movements from images.
- Arrange numbers.

Required materials and set up

1 2 flags of different colours



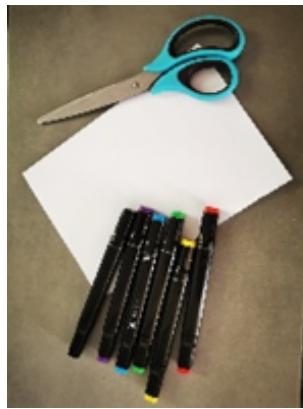
2 1 slate per pupil / 1 slate marker



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Required materials and set up

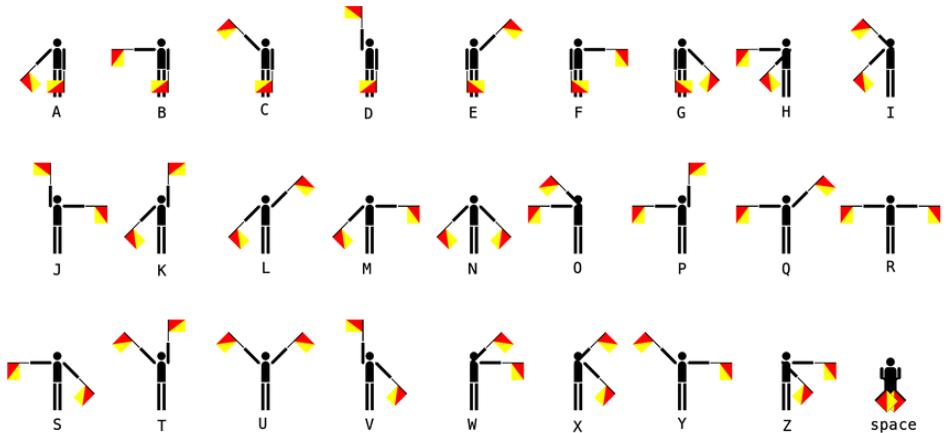
3 Paper / pen / scissors for creating paper labels containing numbers less than or equal to 10000.



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1000

4 1 laminated sheet per pupil containing the Semaphore alphabet and a space for writing numbers in letters



LESSON INSTRUCTIONS

Introduce the activity to the pupils:

- “You will each receive a label on which a number is marked.”
- “Without showing the number to your classmates, you need to write the number in full in the space provided on the sheet.”
- “Then using the Semaphore alphabet, code the word by circling the movement images which correspond to each letter and note its place (1st letter, 2nd letter...).”
- “Each in turn, you have your classmates guess the moving code word using the flags.”
- “The classmates write the number on a slate and show their answer.”
- “The pupil who has motion-coded will say whether it is the correct answer or not.”

The pupil who finds the answer the fastest takes their place and makes their turn replicating the semaphore alphabet and pupils guess her/his number.”


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- Each pupil takes turns reads the number which is noted on the label and without showing it to his classmates, writes it in letters at the bottom of the sheet which contains the alphabet of the Semaphore code.
- The teacher must validate the spelling.
- Then each pupil does the letter-coding of their number on the sheet which contains the Semaphore alphabet by circling the movement which correspond to each letter and note its place (1st letter, 2nd letter...)"
- The teacher appoints a first pupil to start the activity.


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- The pupil comes face to face with his classmates and codes, letter by letter, the number written previously.
- The teacher must accompany the pupil because being in front of his classmates, he must do the movements in mirror mode.
- The classmates guess which number the pupil is coding and propose a result.
- The pupil who finds the answer the fastest takes the place of the first to, in turn, demonstrate their number coded in letters.
- Each pupils note the number on a piece of paper or on a slate.


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- At the end, the teacher asks the pupils to arrange all presented numbers from lowest to highest or vice versa.

CONCLUSION



Evaluate the ease or difficulties of the pupils in the class group, in order to make small groups more homogeneous to redo the activity.

Estimate the memorization and speed of execution of each pupil to bring progress next time.

Evaluate how well they've mastered the numerical order of numbers.



It's possible to make this activity more complex by giving to children labels calculation and ask them to code the result in letters.

In addition, you can ask pupils to dance the alphabet by doing the movements of the Semaphore alphabet to music.

There is a numerical correspondence of the semaphore alphabet (A-1, B-2, C-3, D-4, E-5, F-6, G-7, H-8, I-9 and J-0). It is therefore possible to imagine coded calculations to be solved and even with music by adding separate movements for mathematical symbols such as +, - and =.

RECOMMENDATIONS FOR INCLUSION

How to adapt this lesson to younger pupils

This lesson can be adapted for pupils aged 6-7 years old by having them code their first name, their age or the current date in numbers.

Accommodations for pupils with specific learning disorders

The teacher may prefer to make a starting order so that each pupil participates and not just the fastest pupils to respond.

The benefit of replicating the Semaphore alphabet is that it doesn't require complex choreography and only targets movements of the upper body. However, a learning aid is still needed for children that struggle with hand-eye coordination –this is why it's important to have the alphabet placed in the learning area as a visible reference that children can turn to for reminding them which movements they need to do.

In addition, as this task requires constant recognition and switching between the left and right sides, use a visual cue to remind children of where their left side is, such as placing a ribbon or makeshift watch around their left wrist.

BIBLIOGRAPHY