

Name and surname: \_\_\_\_\_

Grade: \_\_\_\_\_ Date \_\_\_\_\_

# Learning to calculate with the abacus



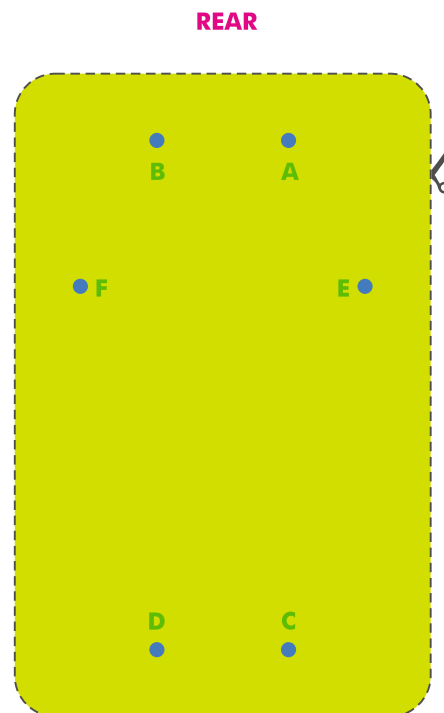
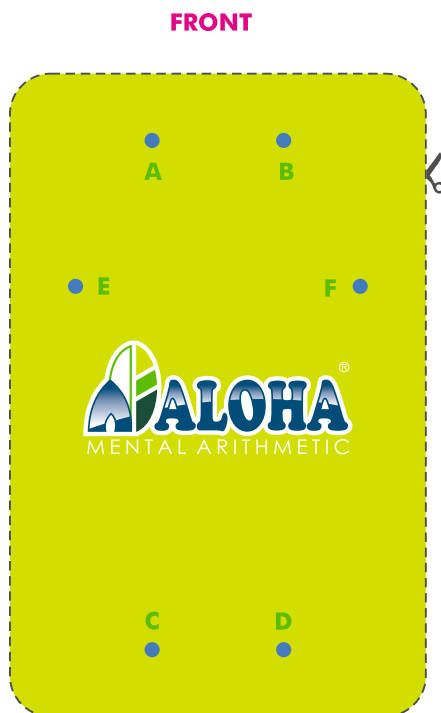
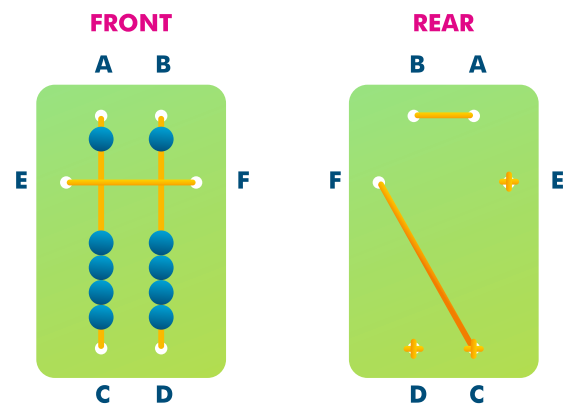
Length: 20 minutes  
Material: thin string of 50 cm,  
10 beads, 8,5 x 5,5 cm cardboard

session  
**2**

## activity 3:

### Build your own abacus

Follow the teacher's instructions to build your own abacus.



## Learning to calculate with the abacus

Length: 20 minutes

Material: awl

Organisation: individual & large group

Content: the parts of the japanese abacus

session  
**2**



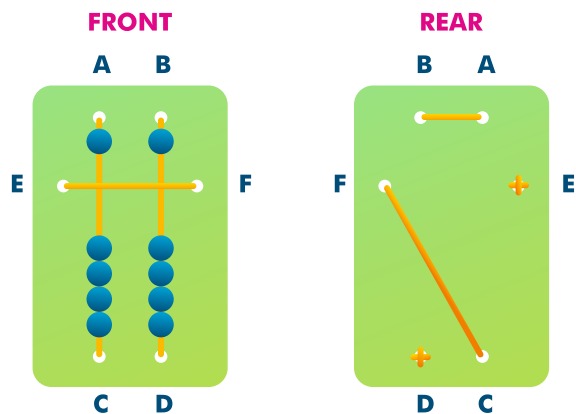
### activity 3:

## Build your abacus

### Information for the teacher

- Cut out the pictures "front" and "rear" from the student practice sheet and stick it to the semi-rigid material  
*NOTE: in the event the semi-rigid material is larger than the indicated it should be previously cut.*
- Make 6 holes using the awl. It is important to keep the distance indicated in the picture (image blue and green part).
- Hold the semi-rigid material and introduce the string through the front "E" hole. To prevent it from loosening, knot the end of the string. In this way, the knot will be at the rear.
- Feed the string through the other hold "F".
- Hold the string end and feed it diagonally from the rear through the "C" hold, so the string comes to the front part. Following, introduce 4 beads in the left column and place them the lowest possible. Afterwards, feed the string under the answer beam (straight between "E" and "F" holes) and introduce another bead.
- Introduce the string end in the "A" hole trying to tighten it as much as possible.
- Feed the string through the back until it comes out from the front of the "B" hole. Subsequently, introduce a bead and following feed the string under the answer beam (straight between holes "E" and "F"). Introduce the other 4 bead in the left column.
- Finally introduce the string through the hole "D". Make a knot tightening the string at the rear side and cut the remaining string.

The final result should be an abacus like this one.





## Game 2

Length: 10 min

### ALOHA dance

**Main ability practised:** Spatial Orientation.

**This game also enhances:** Attention & Concentration and Listening Capacity.

Each number has an assigned action (if needed the information can be written in the blackboard) Numbers:

- 1: step left**
- 2: step right**
- 3: step forward**
- 4: step backwards**
- 5: clap**
- 6: crouch down**

There will be a test-run once. The teacher will say numbers and the students shall reproduce the movements assigned to that number. The teacher will start off by using a few numbers and progressively introduce all of them.

Developed by:



in collaboration with: [www.orientacionandujar.es](http://www.orientacionandujar.es)