



MATH&MOVE

LESSON

USING MOVEMENT TO

identify place value from
simple calculations



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This lesson focuses on calculation operations (addition and subtraction) as well as counting. Pupils will have to find the correct answer to the calculations and correctly count the numbers. Then they have to launch balls in the corresponding baskets.

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



- Make addition and subtraction calculations using objects.
- Count thousands, hundreds, tens and units (depending on the pupil's proficiency level).
- Be more at ease with his or her motor skills.

TOPIC: Digit recognition and simple operations

DURATION: 10-30 mins

LEVEL: Ages 6-7

PARTICIPANTS: individual, in pairs or small groups



LESSON

LESSON PREPARATION

Required skills

For this lesson, pupils should already know how to:

- Recognise the numbers from 0 to 1000 (depending on the level of the pupil).
- Count towards a number.
- Add and subtract numbers from each other (depending on the level of the pupil)

Required materials and set up

1 11 baskets numbered from 0 to 10. Position them in a row from 0 to 10 against a wall



2 4 balloons or balls of different colors (1 for units, 1 for tens, 1 for hundreds and 1 for thousands).

Place them on a table about 3 steps from the baskets (depending on the age of the pupil).



3 1 hoop. Put it on the floor next to the table.



4 Paper / pen / scissors for the creation of paper labels containing calculations adapted to the level of the pupils (addition and/or subtraction).



LESSON INSTRUCTIONS

Introduce the activity to the pupils:

1

- “You have to pick a paper label and read the mathematical operation. Then complete the calculation and give the result.”
- “Once the correct result has been found, choose the units ball by stating the number from the result which represents the units and position yourself in the hoop. Proceed to throw the ball into the corresponding basket. You continue in the same way for the tens, hundreds...”



The result of this calculation is 13: the orange ball representing the units must be thrown into basket number ‘3’ and the blue ball representing the tens must be thrown into basket number ‘1’.



2

The pupil picks a label, does the calculation in his/her head or with their fingers and gives the result to the teacher who validates it.

3

- The teacher defines the colour ball of units, tens, hundred...
- The pupil takes the ball representing units and answers the question: "How many units are there in the result of the operation?"
- The teacher validates the information.
- The pupil stands in the hoop and throws the ball into the corresponding basket.
- The child does the same for the tens, hundreds if they are contained in the result...

CONCLUSION



This activity can be concluded with a barometer to mark the achievement of objectives to track when the pupil repeats the activity and then to be able to evaluate his or her progress.

TO GO FURTHER



Once you've completed a few rounds of this exercise with the groups, you can introduce the concept of pupils making up their own calculations autonomously or quizzing each other with calculations they've thought of on their own, without the use of the paper labels.

The activity can also be done at home.

RECOMMENDATIONS FOR INCLUSION

How to adapt this lesson to older pupils

This activity can be adapted to pupils aged 8-9 years by introducing the notion of multiplication. Alternatively, you can give the pupils the result on the paper labels and have them figure out how they can get to that result using the different operations.

Accommodations for pupils with specific learning disorders

Children can run or walk towards the basket instead or jump in it with both feet.

As this lesson requires the use of many props, remember to differentiate between the different types of lesson materials – using both numbers, words and colours. Therefore, if you have pupils in your class who struggle with memorisation of tasks it would be helpful to label the different coloured balls (units, tens, hundreds...) so that children needn't only rely on their colours as a reminder for their task. In addition, since the task is made up of several steps (calculation, identification of place values, and gross motor skills - walking and throwing), remember to frequently repeat the instructions to children as they go along.

For pupils struggling with gross motor skills (such as accurate throwing into baskets), you can adapt the task to them by asking all groups to walk instead to the basket and place the ball inside once they're close.

BIBLIOGRAPHY

Missiuna, Cheryl, and Lisa Rivard. "Children with Coordination Difficulties: A Flyer for Physical Educators." CanChild, n.d. <https://canchild.ca/en/resources/126-children-with-coordination-difficulties-a-flyer-for-physical-educators>.