



# MATH&MOVE

## LESSON

# USING MOVEMENT TO

recognise digital and analog time



Co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



Co-funded by  
the European Union

This lesson focuses on pupils identifying analog and digital clocks time by playing a game of memory with cards and then replicating the hands of the clocks with their bodies.

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



- Tell the exact time
- Differentiate between analog and digital clocks
- Understand the concept of a time interval having a certain length

**TOPIC:** Telling time

**DURATION:** 30 mins

**LEVEL:** Ages 6-7

**PARTICIPANTS:** groups of 6-10 pupils



## LESSON

### **Required skills**

**For this lesson, pupils should already know how to:**

- Understand the hands of the clock and how they represent hours and minutes
- Know the 12- and 24-hour clock

### **Required materials and set up**

#### **1 An empty space of 10-20m<sup>2</sup>**

- In order for the pupils to have enough space for the movements they will perform during the game, the space needs to be empty.

#### **2 At least 20 cards with digital and analog times**

- Choose 10 times and make digital and analog times corresponding to them. The cards should be randomly placed in the learning area for children, face down.

### Required materials and set up

### 3 A canvas showing the frame of a clock, with numbers but no clock hands

- Children will lay down on this canvas and replicate the times using their bodies for the clock hands (the big hand on the clock should be represented by their legs and the small hand with their arms)

## LESSON INSTRUCTIONS

1

- When the play area and the canvas on which the pupils will perform the movements are set up and the cards with the times are placed face down, the teacher gives the initial instructions with a demonstration of the movements.
- Talk to the pupils about the analog and digital clock and whether they know the direction in which the hands in the analog clock move.



2

- In their groups, the pupils take turns drawing the cards. Each pupil draws two cards face up during their turn. If the times shown on the cards don't match (analog and digital), then it's the next pupil's turn in their group. This continues until one of the pupils uses their memory to recognise the placement of the matching times and flips them both face up.



- Once a pupil matches the times of a digital and analog clock, they move to the clock canvas on the ground and replicate the time laying down with their hands and legs. The rest of the class follows the movements the pupil makes and guesses the time that they show.

## CONCLUSION



The game is over once all of the cards face down have been matched with their appropriate digital/analog pairs, and once all pupils in each group have recreated the times on the clock canvas with their bodies.

## TO GO FURTHER



Pupils can also draw cards with the digital time and in their notebooks draw an analog clock with the corresponding time.

## RECOMMENDATIONS FOR INCLUSION

### How to adapt this lesson to older pupils

The lesson can be adapted to pupils aged of 8-9 years by writing times on the cards which are less simple such as: quarter to 2, 09:35, and playing with the 24-hour clock or AM and PM times. In addition, pupils can be asked to rearrange the completed times according to the earliest to the latest.

### Accommodations for pupils with specific learning disorders

- To help pupils that may struggle with the visualisation and memory skills needed to remember the locations of the different times that remain face down throughout the pupils' turns until they're matched with their pair, you can simplify the matching for them by using two differently coloured cards to differentiate between the cards which show the analog times and those that show the digital times.

## Accommodations for pupils with specific learning disorders

- Insisting that the children read aloud the card pairs once they're flipped over can help them rely less on memorisation once it's their turn.

## BIBLIOGRAPHY

Singh, Manpreet. "How To Teach Telling Time To A Special Education Student?" Number Dyslexia (blog), 2023. <https://numberdyslexia.com/teach-telling-time-special-education-student/>.

The Brook Hill School. "What Time Is It?," 2013. <https://www.brookhill.org/what-time-is-it-2/>.

Yale Dyslexia. "Math: Memory Challenges," n.d. <https://dyslexia.yale.edu/resources/educators/instruction/math-memory-challenges/>.

