

[Illustrative Mathematics](#)

1.MD Making a clock

[Alignment 1: 1.MD.B](#)

MATERIALS

- 12 sheets of laminated paper or tag board with the numbers 1-12
- 12 sheets of laminated paper or tag board with the numbers 0, 5, 10, ... 55
- 1 long arrow (minute hand)
- 1 short arrow (hour hand)
- White board, dry erase marker
- 1 large clock face with hands that can be moved to different positions
- Small clock faces with hands that can be moved to different positions (1 for each pair of students)
- A cut-out circle with the sun on one side and moon on the other.

ACTIONS

The students sit in a large arc/rainbow. The teacher explains that they are going to make a giant clock to practice telling time.

The teacher shows students a clock and asks what numbers they see on it. After students respond, the teacher has students help position the tag board sheets with the numbers 1-12 in a circle on the floor to represent a clock. Students count from 1 o'clock through 12 o'clock as the numbers are laid out.

Then the teacher says,

There are 60 minutes in an hour. When the minute hand goes from one number to the next, that means five minutes have passed. It starts on the 12; that means 0 minutes have passed.

Then the teacher has a student put the paper with the 0 below the paper with the 12 on it. Next, the teacher models counting by 5's, having a student place the corresponding number of minutes below each of the numbers 1-11.

Then the teacher says,

When the minute hand reaches 12 again, that is 60 minutes, and one hour has passed. Now the count starts over for the next hour.

The students and teacher can count by 5s together pointing to each of the numbers 1-11.

The teacher then discusses the hour and minute hands and shows how they move in a clockwise direction. The teacher models moving the hands to show time to the hour and half hour.

In pairs, the students create the same time on their mini-clocks. The teacher guides the students in telling the times to their partner and shows them how to write the times on the whiteboard in both word format (i.e. eight o'clock) and digital format (8:00).

Once students have demonstrated proficiency in identifying what time it is, the teacher uses the moon/sun icon to show that the same time can occur at night or during the day. For example, she can model 12:00 lunchtime and hold up the sun icon, and model 12:00 while the students are in bed and hold up the moon icon. This can be extended with other events that are relevant to the students' lives.

Commentary:

The purpose of this task is to introduce students to the concept of reading an analog clock.

This task can be extended by having students take turns moving the hour and minute hands on the class clock or mini-clocks, as well as figuring out the times. The teacher should use times that are on the hour and half hour (example: 12:00, 1:30, 4:00, 6:30, etc). Students can also write the times on paper or mini whiteboards. To teach the vocabulary of "clockwise," students can practice a clock dance with their partner. The partners face each other, and one gently moves the other's arm in a clockwise motion through each imaginary number on a clock, chanting one o'clock, two o'clock, etc. Or, the teacher can lead the entire class through a clock dance, with the students moving their own arms.

Learning to tell time is a skill that will need to be practiced often in the classroom. There are many different games students can play to reinforce telling time (time bingo and time matching games are fun).



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