APMC HOT ideas

Making time

Hot Ideas for this edition provided by Gail Gorham and Janette Bobis (University of Sydney).

Reading analogue and digital time to the minute

The aim of this puzzle is for students to read time in analogue and digital notation and to convert am and pm notation to 24-hour time.

Resource

16 piece time puzzle[1]

Instructions for use:

1. Copy the puzzle onto card and cut out individual squares.
2. Students reconstruct the puzzle by matching the corresponding time notations on each side of the puzzle pieces.

Investigating 24-hour time

The aim of this resource is to familarise upper primary students with converting am and pm notation to 24-hour time.

Resource

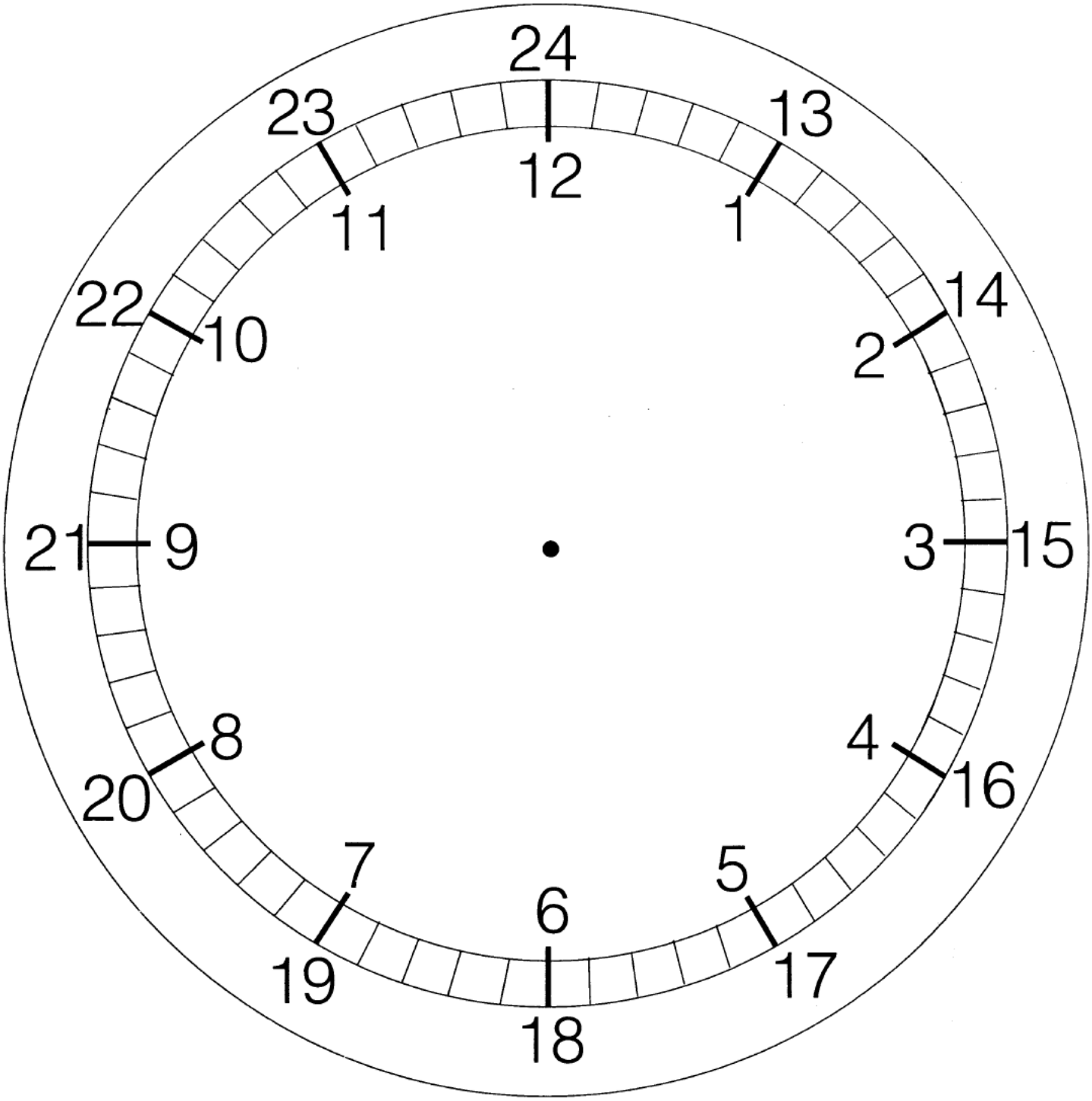
Analogue clock showing 12-hour and 24-hour time[2].

Instructions for using the analogue clock

1. Copy the analogue clock onto card and ask students to cut out and then construct the clock.
2. After discussing the numbers on the outer rim of the clock, ask the students:
   "What patterns can you find to help you remember how to read and interpret 24-hour time?"
3. Discuss where people might need to use 24-hour time and why.

1. Used with permission from Kathryn Moujalli (NSW Department of Education and Training).
2. Used with permission from Green, K., Aldridge, S., McAndrew, D., & Dicks, J. (1993). *Jacaranda Maths: Activity Book 5*. Jacaranda Press: Milton.

25 minutes before 8 25 minutes past 4	6:10 7:35 am 3:40 am	6:10 pm 10 past 6 in the morning 10 minutes to 6 pm	10 past 6 in the evening 19:15
4:25 pm Ten fifteen 9:45 pm	20 to 4 in the morning midday A quarter past 10 1:35 am	17:50 5 minutes after 7:30 am 12:00 10:15 pm	quarter past 7 at night 7:35 11:45 pm
A quarter to 10 at night 9:45 am 6:10 am	1:35 15 minutes before 12 A quarter to ten in the morning 16:30	15 minutes past 10 10 to 6 23:45 21:45	A quarter to 12 at night 10 minutes before 6 13:35
10 minutes after 6 0:00	4:30 pm 20 to 4 midnight	45 minutes after 9 pm 15 minutes before 10 am 3:40	35 minutes after 1 pm 9:45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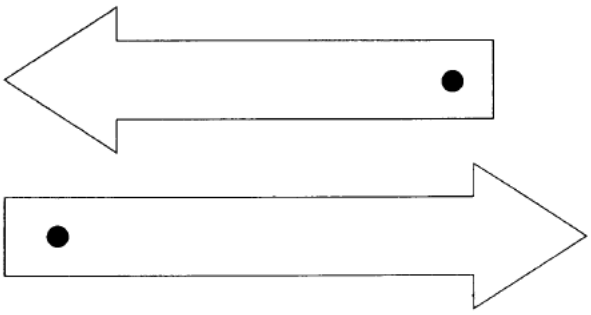

Construct a month (early – middle primary years)

The purpose of this activity is to familiarise students with the components of a calendar month, to learn how one is typically constructed and to practice finding particular dates. Once constructed, the calendar can also be used to explore patterns. With younger children, the activity can be teacher-directed. Middle primary years children should be able to construct a month independently once they are familiar with the task and have a "real" calendar to check their answers.

Resources

Calendar day and numeral pieces
Calendar with the current month (optional)
Activity sheet 2 (optional follow-up for middle-primary students[3])

3. With permission from: Badham, V., Aldridge, S. & Green, K. (1990). *Jacaranda Maths: Activity Book 3.* Jacaranda Press: Milton.

Instructions

1. Cut out the day and numeral pieces from sheet 1 (these could be copied onto clear acetate for use on the overhead projector or enlarged for small group work).
2. Establish what the first day of the week is and ask a child(ren) to place the names of the days horizontally as they appear on the top of a typical calendar.
3. Distribute calendar numeral pieces to various children involved in the activity.
4. Ask children what day and date today is. The child with the correct date numeral should place it underneath its correct day. Discuss whether "space" has to be left above this date for the previous week.
5. Continue to construct the month by asking children to place each date in its correct place on the calendar. For example, ask, "If today is Wednesday the 16th, what was last Wednesday?" (or next Wednesday? What will next Sunday's date be? etc.)
6. Encourage children to generate questions about the days and dates of the month for their peers to answer.
7. Once the month has been constructed, encourage student to "discover" patterns on the calendar they have constructed. For example, ask:
   - What pattern(s) do you see with the numbers when you move up and down the columns?
   - Explain patterns you see when you look diagonally across the month?

SUNDAY	MONDAY	TUESDAY	WEDNESDAY
THURSDAY	FRIDAY	SATURDAY	
1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
25	26	27	28
29	30	31	

This month is _____

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY

What day was the first day of this month? _____

Put a 1 in the box under this name.

How many days are in this month? _____

Complete the calendar for this month.

Find today's date on the calendar and colour it in.

Write today's date. _____

What is the name of today? _____

What special dates are in this month? _____

What day was it four days ago? _____

How many days are there until Sunday? _____

What will be the date in one week? _____

What was the date one week ago? _____

What day is the 10th? _____

What date is one week and five days after the 10th? _____

What day is the last day of the month? _____

What will be the first day of next month? _____