



Time to Quarter Hour

2.2.7

Word Wall: time, long arrow, short arrow, short hand, long hand, minute, count, half, quarter, quarter to, quarter past,

Introduction

Students will be given opportunities to read time on an analogue clock observing the characteristics of quarter hour times.

Resources

- Class clock – drag and move hands to change time:
- Individual whiteboard clock
- Numbers to 12
- Large circle, hoop, or draw a circle with chalk. Draw 12 marks to assist number placement
- Arrows – one long and one short
- Egg timer

Time / Classroom Organisation

This activity may be introduced in a whole group circle or carpet time, or with small groups. Allow 30 minutes for this activity.

Australian Curriculum --- Year level: Two

Tell time to the quarter-hour, using the language of 'past' and 'to' ([ACMMG039](#))

Proficiency Strand:

Fluency – describing and comparing time durations

Activity Process---Time to quarter hour

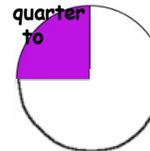
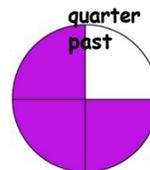
1. Draw a chalk circle on the carpet or use a hoop.
2. Ask students to place the numerals 1---12 around the clock.
3. Place a long arrow and a short arrow on the clock.
4. Review the o'clock times and half hour times – P.2.10 and 1.2.8
5. Place the minute hand on the 12. Explain that the long hand is called a minute hand because it counts the minutes and that the short hand is called an hour hand, because it points to the hour. Discuss how the minute hand moves just a small amount every minute. Use a timer to see how long a minute is.
6. Discuss how far the minute hand would move in 15 minutes. Count up to 15 moving the minute hand as you count.

Part Two

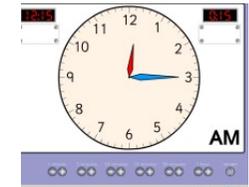
1. Say: As the minute hand moves away from the 12 we say 'quarter past' and as it moves towards the 12 we say 'quarter to'. Ask students to draw the minute hand on their own whiteboard clock pointing to: o'clock, quarter past, 15 minutes past, half past, 30 minutes past, quarter to, 45 minutes past.
2. Ask a student to show what 12 o'clock looks like on the big clock.
3. Now advance the clock on 15 minutes – a quarter of the clock. Ask: *What time is it now?* Explain that this is *quarter past 12 – 12:15*.



5. Highlight the fact that it has moved around a **quarter** of the clock. Fold a paper circle in halves and then quarters to illustrate this point.



4. Show how the hour hand slowly advances as the minute hand moves.
5. Ask students to draw this on their whiteboard clock. Write the digital 2 underneath.
6. Continue through the o'clock times, adding on 15 minutes each time and naming the new time



Catholic Education
Diocese of Cairns

Learning with Faith and Vision

Variations and Extensions

1. IDEAL clock
2. <http://www.teachingtime.co.uk/clock/clockres.html>

Resources: Teaching clock

Repeat the activity process using the *IDEAL clock* – this clock can be advanced one minute or 15 minutes at a time. Note that the hour hand also advances in this time.

3. Daily timetable

Resources: Daily timetable and class clock

Refer to the class clock at intervals during the course of the school day, for example: say *we will finish writing at a quarter past 10*. When it comes to this time say: *Look, the clock says quarter past 10, so it's time to finish*.

3. Fly swat time

Resources:

Cards with clock face; digital and written times
Place 5 cards down on the table. The caller calls out a time that appears in the pile. The first to swat the correct time takes the card. The caller replaces the card and calls another time. Play continues until all the cards have been claimed, or a set time has elapsed. The player with the most cards is the winner.

4. AM/PM

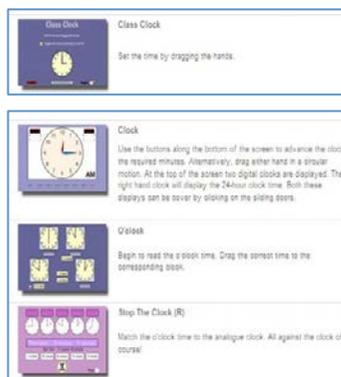
Resources: paper.

Fold paper in half and label the top as AM and the bottom as PM. Draw an activity in each side that you would do in the AM and PM .

Source: Andrea Hillbrick, 2005. *Tuning In with Task Cards*. Curriculum Corpora2on:Carlton South, Vic

Digital Resources

<http://www.scottle.edu.au/ec/viewing/R10914/index.html>



Contexts for Learning

Play:

Fly swat game

Concentration using time cards

Snap

Investigation:

Problem – show the children a clock with only an hour hand.

Say:

I have a friend who has a clock – but it only has the hour hand.

She has to take her dog to the vet at quarter past 3 (3:15). How will she know when it is time to go?

Real life experience:

Use clock times to let students know when an event will happen, for example: *we'll go swimming at 1.45 p.m. What will the clock look like?*

Routines and Transitions:

Use the egg timer to measure the duration of parts of the day, for example: start the egg timer at the beginning of maths groups, and stop the timer at the end.

<http://www.online-stopwatch.com/eggtimer-countdown/full-screen/>

Assessment

• Give each student a piece of paper and black pen. Simply ask them to “to draw a clock”. Later discuss the clock with each student (*tell me about your clock; how do clocks work? What time does your clock show?* etc. to gain further insights. Annotate these for future reference.

Source: Downton, Knight, Clarke, Lewis. 2006. *Mathematics Assessment for learning*. ACU: Fitzroy. p.104.

• Show quarter to and quarter past times – ask students to identify the time using the language of ‘quarter to’ and ‘quarter past’.

Achievement Standard: tell time to the quarter hour

Background Reading

During the primary years, students should develop the basic ideas and skills associated with measuring time (e.g. What time it is) and elapsed time (e.g. How long it took).The units we use for describing what time it is, was or will be, are related to the recurring or cyclical nature of physical phenomena that produce day and night, the waxing and waning of the moon and the seasons. Many social and cultural practices relate to these recurring physical phenomena. So, within particular communities, it is possible to guess what time of day, week or year it is from what people are doing.

Source: *First steps in Mathematics – Measurement – Understand Units Direct Measure*, 2010. Rigby: Port Melbourne. p 150.

NAPLAN links

- [Measurement – reading time](#)

Links to Related MAGs

P.2.10 – O'clock 2mes

1.2.8 – Time to half hour

1.4.9 – Time – digital and analogue

3.1.8 – Time to the minute --- 1



Adapted for use in the Cairns Diocese with the permission of the Catholic Education Office Toowoomba