### 4.38 Questions about time

Topic: Measurement
Subtopic: Time
Activity type/ skill: Question forms
Literacy focus: Listening
Genre: Expressions of time

## Objective

- Hear mathematical problems accurately.
- Scaffold mathematical problem-solving by providing a technique for breaking down question forms.


## What you need

- Student worksheet (see the third page)
- Audio track 4.38


## What to do

1. Look at the top of the student worksheet and talk about how mathematics problems are worded.
2. On the board, write: How many seconds in a minute?.

- Underline the question words (How many) and decide what is being asked for (a number).
- Circle the time words (seconds, minute) and see if students can define both.
- Read the question aloud and ask for answers.
- Write the answer after the question (60 seconds).
- Ask what time measurement is in the answer (seconds).
- Ask them what a full answer would be (There are 60 seconds in a minute.)

3. Play track 4.38 (Track 12 for this topic) and have students listen and write the answers to Part A. Pause the track.
4. Mark the work as you listen again together. Accept accurate abbreviations.
5. The questions in Part B are a little more complex. On the board, write: I can hold my breath for one minute. How many seconds is that?

- Underline the question words (How many) and decide what is asked for (a number).
- Circle the time words (minute, seconds) and see if students can define both. Box the number.
- Ask questions about the problem. How long could they hold their breath for? Can you say that another way?
- Look at the first question and compare the two. What is the difference? What is the mathematical idea underlying the problem? ( 60 seconds $=1$ minute.)

6. Play Part B and have them answer the questions. Mark the work as you listen again together.
7. Remind students that it is important to ask for repetition, and offer these ways of asking politely:

- 'Could you repeat that please'
- 'I'm sorry. I didn't quite hear that. Could you repeat that please?'

8. Read the following questions one by one. Point to a student after each question and they must ask you politely to repeat it, then have them write the answers on their worksheet. Emphasise that each problem is using words to give a simple mathematical problem that can be easy to uncover.
9. It says to heat the pizza for 3 minutes in the microwave. How many seconds is that?
10. Ravi goes to the gym for 30 minutes every school day. How many hours is that a week?
11. The train trip from town to here takes three quarters of an hour. If I leave at 2 o'clock, when will I get to town?
12. It is 3 weeks until the big football match. Sam trains for 30 minutes every day. How many hours a day is that?
13. Long ago, Queen Caroline had a bath once a month. How many baths would she take in 3 years?
14. It takes an hour and 10 minutes to get to the beach. How many minutes is that?

Answers

| A1. 60 | B1. 60 | C1. 180 |
| :--- | :--- | :--- |
| A2. 7 | B2. 7 | C2. 2.5 |
| A3. 12 | B3. 12 | C3. 2.45 p.m. |
| A4. 60 | B4. 15 | C4. half an hour |
| A5. 52 | B5. 30 | C5. 36 |
| A6. 24 | B6. 24 | C6. 70 |

## Extending the activity

- Regularly go through simple mathematics problems in the area students are working with at the time. Encourage the students to analyse the components of the problem and the language used (for example, question words, essential vocabulary).


## Listening to questions

When you listen to time problems in mathematics:

- listen for the question carefully
- listen for question words, time words and numbers
- work out what the mathematical problem is
- work out and write your answer.

Track 12

A 1

2

3 $\qquad$
4
5
6

B
1
2
3
4
5
6
C
1

2

3
4

