

AFRICAN INSTITUTE FOR MATHEMATICAL SCIENCES

SCHOOLS ENRICHMENT CENTRE (AIMSSEC)

AIMING HIGH

JUST A MINUTE - 30 MINUTE LESSON



How long is a minute? What can we do in a minute?

You will need: 2 stopwatches, paper & pencils (or other recording implements).

Activity 1: Estimate a minute

Sit with your head on your arms so that you will not be distracted. When the timekeeper says GO start to estimate or guess when a minute has passed, and when you think a minute has passed sit up and raise a hand. How accurate

was your guess?

The timekeeper will make a tally of how many learners sat up in 10 second segments of the minute as an indication of how accurate the group are as a whole. How many guesses in the class were less than a minute and how many are still 'heads down' when a minute is up.

Now that you have experienced what a minute feels like, this exercise will be repeated and recorded as before. Were you more accurate the second time?

Activity 2: How many jumping jacks in a minute?

The second activity will help you 'feel' a minute. How many jumping jacks can you do in a minute?



Description of a jumping jack:

Begin with the feet together and hands by the sides. Jump on the spot like the teacher in the picture, landing with the feet apart and hands raised so that the arms and legs form an X. Jump again landing back in the first position.

This counts as one jumping jack.

How many jumping jacks do you think you will be able to do in a minute? Work with a partner. One of the pair will jump and the other

will count when the timekeeper, using a stopwatch, give a signal to start and stop jumping. The counter notes down the number that their partner did and then you swap roles and repeat the exercise. Keep the records of how many jumps you did.

Activity 3: Re-estimate a minute

How could you make your estimates more accurate? There are 60 seconds in a minute. Another method of estimating time is to count one one thousand, two one thousands, three one thousands and so on up to 60 one thousands. Another counting method is 'one Mississippi,' etc. up to 60 Mississippi.

Repeat Activity 1 and compare the accuracy with your first attempt. Which method was the best?

HELP

To get a good idea of how long is a minute, look at a clock or watch with a second hand, and keep looking at the second hand as it goes round one complete revolution in one minute.

Write down the numbers 1 to 60. How long did it take? Write them a second time and see how close they can get to writing the numbers 1 to 60 in 60 seconds. How can you pace yourself to get as close to 60 numbers in 60 seconds as possible?

NEXT

What other things can you do in 60 seconds to create your own timer? This could be bouncing a ball, or writing out tables facts!

Work out how many minutes in a day, in a week, and in a year. How many minutes have you been alive? What do you need to know to make this calculation accurately? *E.g. Leap years*, exact time of birth