Keeping the Learning Going @ Home: Measuring a minute

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PDST is a Department of Education and Skills support service.

The latest edition looks at fun ways to help children learn how to measure time intervals

In previous weeks, the PDST shared tips on how to make the most out of reading time, how to support children in developing digital storytelling and how to keep happy, healthy and learning movement skills.

In school children study two distinct aspects of time.

The first is “reading and telling the time” and the second aspect is the measuring of time intervals.

Teachers often report that their pupils struggle with the concept of time. This difficulty arises for a number of reasons including the fact that although time is a measure it is unlike other measures such as length, capacity, weight, money and area, insofar as it cannot be seen or touched.

Another issue with measuring time intervals is that scientists insist that time passes at a constant rate and yet it does not feel like that in direct experience. For many of us, five minutes in the dentist waiting room can feel longer than an hour spent in the company of good friends.

PDST is sharing tips for how parents can help keep children active while schools are closed Photo: PDST Children often hear phrases such as, “Just a minute” or “I’ll be with you in a minute”. In reality, how long is that “minute”? 20 seconds, 50 seconds, a minute, 5 minutes, 20 minutes, longer?

Just a minute is a great challenge that helps children develop their understanding of how long a minute actually is. Very simply, children make a list of all the things that they think they can do in a minute. Ask them to make an estimate before each activity and to keep a record of what could be achieved in a minute.

Example:

Activity	Estimate count	Result count
Hop on one foot	58 seconds	64 seconds
Eye blinks	80 seconds	125 seconds

Here are a few suggested activities to get you started:

- Write your name
- Hop on one foot
- Do jumping jacks
- Put pegs on a washing line
- Plait your hair
- Put Lego pieces together
- Stack blocks
- Run to the bottom of the garden and back
- Open and close your pencil case
- Hula hoop
- Click your fingers
- Clap your hands
- Say the alphabet

● Count by ones forward

● Count by ones backwards from 100

● Bounce a ball

This activity provides a wonderful opportunity to explore the many ways that time is displayed in the home and which devices can support children to time a minute. From fitness trackers to clock apps on phones and tablets, from cooking timers to analogue clocks- does your child know how to use them to time a minute?

A few minutes showing a child how to set a timer or how to observe the second hand on a clock making one full rotation of the clock face can lead to many hours of fun, independent and educational play.

There are many activities that can be completed within a minute that could form the basis of an investigation. For example, if we take the activity of bouncing a ball, children could investigate whether they get the same result if they change the type of ball used – football, basketball, tennis ball, sponge ball.

Does the surface the ball is bounced on (eg: concrete, grass, carpet, wooden floor) have an impact on the result? If the ball is bounced with the right hand/left hand/ both hands, does that have an impact on the result? If the ball is wet, what happens? If the ground is wet what happens?

What other factors have an impact on the result? Encourage your child to record their findings. This can be done with words, pictures writing, or by creating a short video explaining what they wanted to investigate, how they carried out their investigation and what their findings were. Share your children's investigations with us on Twitter @PDSTPrimarySTEM.

Sample record sheet:

What I want to find out is….
This is how I am going to find it out
My /Estimate Guess
My Result

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