



The element of surprise

NSTF Share 'n Dare activities, October 2019

The 15 grade 8 and 9 learners from Phelindaba Secondary School who attended this [NSTF Share & Dare](#) event on 31 October received a warm welcome from Ms Johanna Mabitsela, scientist at [Nuclear Energy Corporation of South Africa](#) (Necsa). She gave an overview of Necsa and explained in detail the basics of a nuclear power plant, as well as Necsa's general activities.

The speaker of the day was Professor Tandi Matsha who holds the SARChI Chair: Cardiometabolic Health, Department of Biomedical Sciences, [Cape Peninsula University of Technology](#) and is the Founding Director of the [South African Medical Research Council Cardiometabolic Health Research Unit](#) at the same institution. She is also the winner of the [2018/19 NSTF-South32 Data for Research Award](#). The talk was sponsored by the [Department of Science and Innovation](#) (DSI) as part of the [International Year of the Periodic Table](#) (IYPT) activities.

She started her talk by mentioning that there are 118 elements in the Periodic Table of Elements and that the first 19 elements are called essential elements. Without the essential elements we cannot survive. She gave the example of potassium, which assists our hearts to beat. She said that only 90 elements on the periodic table are found in nature and the rest are manmade.

Prof Matsha encouraged learners not to look at science as if it is something extraordinary, because science is found all around us. She encouraged the learners to believe in themselves and to start thinking positively so that they can achieve what they want in life. She mentioned the example of wifi, saying that we cannot see wifi but we believe that it is there and it is working and we use it. In the same way we must believe in ourselves, tell our minds that we can achieve what we want and we will achieve it.

"In order to believe in yourself, you should act like you have already achieved your dream. If you want to be a medical doctor or a journalist, you should start acting like one," said Prof Matsha. She emphasised that one should set goals and make sure that you live by those values. She also encouraged the learners to never allow their circumstances to define them, to live with hope and to break their goals into small, achievable pieces.

In closure, Prof Matsha taught the learners a song about the first 20 elements of the periodic table. Some learners mastered it and enjoyed singing along with her.



Professor Tandi Matsha addresses the learners at Necsa.



Ms Johanna Mabitsela of Necsa welcomes the learners.