General message for Science Teachers
From Godwin (G2) Nhauro: NECT - Assistant National Education Programme Manager

Good day colleagues
This is an uncertain time for all of us. The sands are shifting daily and many of us are feeling anxious about what happens next to our health and safety, livelihood, to our education, to our freedoms and to life as we know it.

Whilst we practice physical distance and social solidarity, this disruption also provides us with an opportunity to reimagine how we live and how we work. It also allows us to exercise control over the aspects that we can change and, in this instance, how we can start working on curriculum catch up plans.

Teaching Science for Understanding: Part 3 Science messaging (141 words)	**WEEK 3: 10 April 2020** Strand: Energy and Change
Good day scientist groomers: From Godwin (G2) Nhauro – ANEPM (NECT)	
In our last 2 messages on Teaching science for understanding series we touched on the use of Visual aids, animations, simulations, models as teaching methodologies of promoting interactive learning as well as increasing and improving learner information retention on concepts. This week let's look at how we can teach energy and change for understanding. In addition to employing the above-mentioned approaches to teach this strand, this concept can be easily taught through a series of fun mini-games and play. You can use this to determine what your learners already know and to challenge their own thinking, thereby extending their understanding. This approach will deliver improved learner engagement and academic performance in your classroom. *"Tell me, I forget, show me, I remember, involve me, I understand."* Carl Orff For some examples of mini games check: https://www.legendsoflearning.com/learning-objectives/conservation-of-energy/ Please stay safe from the Covid-19.	

Teaching Science for Understanding: Part 1 Science messaging (133 words)	**WEEK 1: 27 MARCH 2020** Strand: Life and Living
Good day scientist groomers: message from Godwin (G2) Nhauro - ANEPM (NECT)	
Did you know that more than 90% of the life and living concepts can be taught through visual aids? Visual aids supplements text/words with a picture, chart, or illustration, thus facilitating a more interactive environment with the learners. Most learners learn better through *visuals* and *interaction* than through listening. So, a good visual aid can really help your learners actively participate, understand and remember what you taught. Study shows learners who only heard a teacher retains about 10% of the information; heard and saw visual representation about 65%; heard, saw and interact about 90%. That's a lot more! Colleagues let's keep our lessons more interactive and interesting. *"Tell me, I forget, show me, I remember, involve me, I understand."* Carl Orff For free charts and posters: https://za.pinterest.com/pin/359373245246941333/ Please stay safe from the Covid-19.	

Teaching Science for Understanding: Part 2 Science messaging (195 words)	**WEEK 2: 3 April 2020** Strand: Matter and Materials
Good day scientist groomers: From Godwin (G2) Nhauro - ANEPM (NECT)	
Matter and materials is one of the areas in which concepts often cannot be learned effectively, and where misconceptions are encountered at the highest rate in NS/Tech. Misconceptions can be largely attributed to the abstract/theoretical teaching approach to experimental based concepts due to lack of lab facilities and equipment in most of our schools. Solution: animation, videos, simulations and models (ball-and-stick) are powerful tools that you can use to transform abstract concepts into interactive visual content, making it easier for learners to understand the concepts and yielding almost the same results as performing the real experiments. This forms part of inquiry-based learning where learners are provided with opportunities to understand concepts through active learning, make observations, ask questions, test out ideas, think creatively, use their intuition, attain specific science process skills and communicate scientific explanations and arguments. If learners create models it can make their thinking visible, allowing rapid feedback from teacher to learner and learner to teacher, thereby allowing you as a teacher to make meaningful learning a reality. For free science animations and simulations check: https://phet.colorado.edu/ *Always remember this approach must be accompanied by pre-and post-explanations and discussion to address misinterpretations and misconceptions.* Please stay safe from the Covid-19.	