

## General message for Science Teachers

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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 largely be 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.