


<p><b>TERM 3 ITHEMU YESI-3</b></p>  <p><b>basic education</b> Department: Basic Education REPUBLIC OF SOUTH AFRICA</p>	WEEK 1 ISONTO 1	WEEK 2 ISONTO 2	WEEK 3 ISONTO 3	WEEK 4 ISONTO 4	WEEK 5 ISONTO 5	WEEK 6 ISONTO 6	WEEK 7 ISONTO 7	WEEK 8 ISONTO 8	WEEK 9 ISONTO 9	WEEK 10 ISONTO 10	WEEK 11 ISONTO 11							
<p><b>CAPS TOPIC IZIHLOKO NGOKUKA CAPS</b></p>	<p><b>Energy and change/I-Eneji noShintsho</b></p>																	
<p><b>CORE CONCEPTS, SKILLS AND VALUES</b></p> <p><b>IZIHLOKO NGQANGI AMAKHONO NAMAGUGU</b></p>	<p><b>Energy and energy transfer I-eneji nokudluliswa kwayo</b></p>	<p><b>Energy around us I-eneji esizungezile</b></p>	<p><b>Movement and energy in a system Ukunyakaza kwe-eneji kwisistimu</b></p>	<p><b>Energy and sound I-eneji nomsindo</b></p>	<p>Remediation, revision, and consolidation</p>	<p><b>Ukubuyekeza nokugcizelela</b></p>												
<p><b>RESOURCES TO ENHANCE LEARNING</b></p> <p><b>IZINSIZA KUFUNDISA EZITHUTHUKISA UKUFUNDA</b></p>	<ul style="list-style-type: none"> <li>Energy for life</li> <li>Energy from the Sun</li> </ul>	<ul style="list-style-type: none"> <li>I-eneji yempilo</li> <li>I-eneji evela eLangeni</li> </ul>	<ul style="list-style-type: none"> <li>Energy</li> <li>Input and output energy</li> </ul>	<ul style="list-style-type: none"> <li>I-eneji</li> <li>i-eneji engenayo (inphuthi eneji) ne-eneji ephumayo (awthphuthi eneji)</li> </ul>	<ul style="list-style-type: none"> <li>Movement and musical instruments</li> <li>Umanyakazo nezinsimbi zomculo</li> </ul>							<ul style="list-style-type: none"> <li>Vibrations and sound</li> <li>Making sounds</li> <li>Noise pollution</li> </ul>	<ul style="list-style-type: none"> <li>Pictures and examples of a selection of machines and appliances including a kettle, stove, torch, radio, iron, fan/hair dryer, car/bicycle and drum</li> <li>Video clips from the internet</li> </ul>	<ul style="list-style-type: none"> <li>Izithombe nezibonelo zemishini ekhethekile ezibandakanya ama-apulayensi okungaba iketela, isitofu, ithoshi, umsakazo, i-ayina/ insimbi yoku-ayina, isiphephetha-moya, isomisizinwele, imoto/ ibhayisikili kanye nedramu</li> <li>Iziqeshana zamavidiyo ezisuselwe ku-inthanethi</li> </ul>	<ul style="list-style-type: none"> <li>Examples of musical instruments.</li> <li>Materials to make musical instruments</li> </ul>	<ul style="list-style-type: none"> <li>Izibonelo zezinsimbi zomculo</li> <li>Amamethiriyeli okwakha izinsimbi zomculo</li> </ul>	<ul style="list-style-type: none"> <li>Pictures of the human ear, its parts and how one hears</li> <li>Examples of musical instruments made by learners</li> <li>Video clips from the internet</li> </ul>	<ul style="list-style-type: none"> <li>Izithombe zendlebe yomuntu, izingxenye zayo nendlela umuntu ezwa ngayo.</li> <li>Izibonelo zezinsimbi zomculo ezakhiwe abafundi.</li> <li>Iziqeshana zevidiyo ezisuselwe kwi-inthanethi</li> </ul>
<p><b>INFORMAL ASSESSMENT</b></p> <p><b>UKUHLOLA KWANSUKUZONKE</b></p>	<ul style="list-style-type: none"> <li>Describe the transfer of energy from the Sun</li> <li>Identify activities that people and animals do that require energy.</li> <li>Draw and explain how animals get energy for life processes from the Sun</li> <li>Investigate the input and output energy of appliances, e.g. a kettle, stove, torch, radio, iron, fan/hair dryer, car/bicycle, drum, etc.</li> </ul>	<ul style="list-style-type: none"> <li>Chaza ukudluliswa kwe-eneji evela eLangeni.</li> <li>Hlonza imisebenzi eyenziwa abantu nezilwane edinga i-eneji.</li> <li>Dweba futhi uchaze ukuthi izilwane ziyithola kanjani i-eneji yezinqubo zempilo eLangeni.</li> <li>Phenya nge eneji engenayo (inphuthi eneji) ne eneji ephumayo (awthphuthi eneji) yezinto zikagesi, isib. iketela, isitofu, umsakazo, i-ayina,</li> </ul>	<ul style="list-style-type: none"> <li>Research about the various indigenous musical instruments and how they work.</li> <li>Investigate how musical instruments make music</li> <li>Design and make your own</li> </ul>	<ul style="list-style-type: none"> <li>Cwanninga ngezinhlobonhlobo zezinsimbi zomculo wendabuko nokuthi zisebenza kanjani</li> <li>Phenya ukuthi izinsimbi zomculo ziwenza kanjani umculo awenza kanjani umculo</li> <li>Dizayna futhi wakhe ezakho izinsimbi zomculo</li> </ul>	<ul style="list-style-type: none"> <li>Investigate how different types of movement cause vibrations that cause different sounds using an elastic band</li> <li>Investigate how to make sounds louder and travel further</li> </ul>							<ul style="list-style-type: none"> <li>Phenya ukuthi izinhlobo ezihlukene zomnyakazo zikubanga kanjani ukudlikiza okwenza imisindo ehlukene usebenzisa ibhande le-lastiki.</li> <li>Phenya indlela yokwenza imisindo izwakale kakhulu futhi izwakale kude.</li> </ul>						

		ifeni/isomisizinwele, imoto/ibhayisikili, idramu, njll.	musical instruments		<ul style="list-style-type: none"> <li>Identify and describe sources of noise pollution</li> <li>Research the health risk of exposure to loud music and explain to your peers how best to protect their hearing</li> </ul>	<ul style="list-style-type: none"> <li>Hlonza futhi uchaze imithombo yemisindo enobungozi</li> <li>Cwanginga ngobungozi bokuba seduzane nomsindo womculo ophezulu bese uchazela ontanga bakho ukuthi bangakuvikela kangcono kanjani ukuzwa kwabo</li> </ul>	
<b>SBA (FORMAL ASSESSMENT)</b> <b>UKUHLOLA OKUHLELEKILE (SBA)</b>	<ul style="list-style-type: none"> <li>Practical task/investigation <b>Isivivinyo sokwenziwayo ( <i>Practical task</i> ) / uphenyo</b></li> <li>Test <b>Isivivinyo</b></li> </ul>						

## MAJOR PROCESS AND DESIGN SKILLS /AMAKHONO AMAPHROSESI NAMADIZAYNI ASEMQOKA

The teaching and learning of Natural Sciences and Technology involves the development of a range of process and design skills that may be used in everyday life in the community and in the workplace. Learners also develop the ability to think objectively and use a variety of forms of reasoning while they use these skills. Learners can gain these skills in an environment that taps into their curiosity about the world, and that supports creativity, responsibility and growing confidence. The following are the cognitive and practical process and design skills that learners will be able to develop in Natural Sciences and Technology.

**Ukufundisa nokufundwa kweSayensi Yemvelo NeThekhnoloji kubandakanya ukuthuthukiswa kwamakhono angamaphrosesi namadizayni angasetshenziswa ekuphileni kwansuku zonke emphakathini nasezindaweni zokusebenza. Abafundi baphinde bathuthukise ikhono lokucabanga ngokunemba kanye nokusebenzisa izinhlobo ezahlukene ukucabangisisa ngenkathi besebenzisa lamakhono. Abafundi bangakwazi ukuzuza lamakhono esimeni esithinta kuwo ilukuluku ngomhlaba, futhi lokho kusekela ubuhlakani, ukuzibophezela kanye nokuzethemba. Lokhu okulandela kungamakhona okucabanga nokuphenya nokudizayna abafundi abazokwazi ukukuthuthukisa kwiSayensi Yemvelo neThekhnoloji.**

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| <ol style="list-style-type: none"> <li>1. <i>Accessing and recalling information – being able to use a variety of sources to acquire information, and to remember relevant facts and key ideas, and to build a conceptual framework</i></li> <li>2. <i>Observing – noting objects, organisms and events in detail</i></li> <li>3. <i>Comparing – noting similarities and differences between things</i></li> <li>4. <i>Measuring – using measuring instruments such as rulers, thermometers, clocks and syringes (for volume)</i></li> <li>5. <i>Sorting and classifying – applying criteria in order to sort items into a table, mind-map, key, list or other format</i></li> <li>6. <i>Identifying problems and issues – being able to articulate the needs and wants of people in society</i><br/>STATEMENT (CAPS)</li> <li>7. <i>Raising questions – being able to think of and articulate relevant questions about problems, issues and natural phenomena</i></li> <li>8. <i>Predicting – stating, before an investigation, what the learner thinks the results will be for that particular investigation</i></li> <li>9. <i>Hypothesising – putting forward a suggestion or possible explanation to account for certain facts. A hypothesis is used as a basis for further investigation that will prove or disprove the hypothesis</i></li> <li>10. <i>Planning investigations – thinking through the method for an activity or investigation in advance. Identifying the need to make an investigation a fair test by keeping some things (variables) the same, while other things will vary</i></li> <li>11. <i>Doing investigations – this involves carrying out methods using appropriate apparatus and equipment, and collecting data by observing and comparing, measuring and estimating, sequencing, or sorting and classifying. Sometimes an investigation has to be repeated to verify the results</i></li> <li>12. <i>Recording information – recording data from an investigation in a systematic way, which includes drawings, descriptions, tables and graphs</i></li> <li>13. <i>Interpreting information – explaining what the results of an activity or investigation mean (this includes reading skills)</i></li> <li>14. <i>Designing – showing (e.g. by drawing) how something is to be made, taking into account the design brief, specifications and constraints</i></li> <li>15. <i>Making/constructing – building or assembling an object using appropriate materials and tools and using skills such as measuring, cutting, folding, rolling and gluing</i></li> <li>16. <i>Evaluating and improving products – using criteria to assess a constructed object and then stating or carrying out ways to refine that object</i></li> <li>17. <i>Communicating – using written, oral, visual, graphic and other forms of communication to make information available to other people</i></li> </ol> | <ol style="list-style-type: none"> <li>1. <b><i>Ukufinyelela nokukhumbula ulwazi - ukukwazi ukusebenzisa izinsiza sidingo ezahlukahlukene ukuthola ulwazi, nokukhumbula amaphuzu nemibono esemqoka, kanye nokuqonda ubudlelwane bolwazi</i></b></li> <li>2. <b><i>Ukuqaphela - ukuqaphela izinto eziphilayo nezingaphili nezehlakalo ngokugxilile</i></b></li> <li>3. <b><i>Ukuqhathanisa - ukuqaphela okufanayo nokungafani ezintweni</i></b></li> <li>4. <b><i>Ukukala – ukusebenzisa amathuluzi okukala njengamarula, izikalikushisa, amawashi kanye nemijovo (kumthamo).</i></b></li> <li>5. <b><i>Ukuhlunga nokuhlukanisa – sebenzisa uhlelo lokuhlunga izinto kwithebula, kwi mephu yengqondo, kukhiye, ohlwini kanye nangamanye amafomethi</i></b></li> <li>6. <b><i>Ukuhlonza izinkinga nezimo - ukwazi ukuchaza izidingo nezimfuno zabantu emphakathini</i></b></li> <li>7. <b><i>Ukubuza - ukwazi ukucabanga nokuveza imibuzo efanele eqondene nezinkinga, kanye nezimo zendalo</i></b></li> <li>8. <b><i>Ukuhlawumbisela - umfundi uyaqagula ngaphambi yophenyo ukuthi imiphumela yophenyo izoba yini</i></b></li> <li>9. <b><i>Ukuhayphothesayza - isiphakamiso noma incazelo ngamaqiniso athile. I-hayphothesisi isetshenziswa njengesisekelo sophenyo olwengeziwe oluzofakazela noma luphikise umbono.</i></b></li> <li>10. <b><i>Ukuhlela uphenyo - ukucabanga ngohlelo lophenyo lungakaqali uphenyo. Ukuhlonza isidingo sokwenza uphenyo lube ngolunobulungiswa, ngokwenza amanye amaveriyebuli angashintshi amanye abe eshintsha</i></b></li> <li>11. <b><i>Ukwenza uphenyo - lokhu kubandakanya ukusetshenziswa kwezinto ezifanele ukusetshenziswa, ukuqoqa ulwazi ngokuqaphela nokuqhathanisa, ukukala nokuqagula, ukuhlela nokuhlunga. Kwesinye isikhathi uphenyo kufanele luphindwe ukuze kuqinisekise imiphumela</i></b></li> <li>12. <b><i>Ukuqopha ulwazi - ukuqopha idatha ophenyweni ngendlela ehlelekile, okuhlanganisa imidwebo, izincazelo, amathebula kanye namagrafu</i></b></li> <li>13. <b><i>Ukhumusha ulwazi - ukuchaza ukuthi isho ukuthini imiphumela ye-ekthivithi noma yophenyo (lokhu kuhlanganisa amakhono okufunda)</i></b></li> <li>14. <b><i>Ukudizayna - ukukhombisa (isib. ngokudweba) ukuthi kumele into yenziwe kanjani, ngokucabanga ngomyalelo wedizayni, incasiselomcikilisho kanye nezithiyo</i></b></li> <li>15. <b><i>Ukwenza/ukwakha – ukwakha noma ukuhlanganisa into kusetshenziswa amametheriyeli afanele kanye namathuluzi kanye nokusebenzisa amakhono afana nokukala, ukusika, ukugoqa, ukusonga nokunamathisela</i></b></li> <li>16. <b><i>Ukuhlola nokwenza imikhiqizo kangcono - ukusebenzisa imibandela ukuhlola into eyakhiwe bese usho noma wenze izindlela zokuyenza kangcono</i></b></li> <li>17. <b><i>Ukuxhumana - ukusebenzisa okubhaliwe, okukhulunywayo, okubonakalayo, okudwetshiwe kanye nezinye izindlela zokuxhumana ukwenza ulwazi lutholakale kwabanye abantu</i></b></li> </ol> |
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