

# . 2026 GRADE 10 GENERAL SCIENCE SCHEMES OF WORK TERM 1

SCHOOL..... TEACHERS NAME..... TERM 1

WK	LS N	Strand	Sub-strand	Specific-Learning outcomes	Learning Experience	Key Inquiry Question(S)	Learning Resources	Assessment Methods	Ref	
1	1	MECHANICS AND THERMAL PHYSICS	Mechanics and Thermal Physics	<p>Introduction to Physics</p> <p>Meaning of Physics as a body of knowledge in science, Branches of Physics as a field of study (<i>mechanics, electricity &amp; magnetism, thermodynamics, geometrical optics, waves, electronics, modern physics, astronomy</i>)</p>	<p>By the end of the lesson, the learner should be able to:</p> <ul style="list-style-type: none"> <li>a) Explain Physics as a body of knowledge in science.</li> <li>b) Investigate the branches of Physics as a field of study.</li> <li>c) Have a desire to learn more about physics.</li> </ul>	<p>In groups, learners are guided to work with others to search for the meaning of Physics as a branch of science.</p> <p>In groups, learners are guided to discuss with peers the main branches of Physics.</p> <p>In groups, learners are guided to discuss with peers the importance of Physics in day-to-day life and share the findings with the class</p>	What is the meaning of physics?	<p>Physics Curriculum Design Grade 10</p> <p>Laboratory Apparatus and Equipment</p> <p>Textbooks</p> <p>Models</p> <p>Digital media Print media (charts, pictures, journals, magazines)</p> <p>Digital Devices</p> <p>Software</p> <p>Recordings</p> <p>Resource persons</p>	<p>Project Journals</p> <p>Portfolio</p> <p>Oral or Aural Question(s)s</p> <p>Explorations</p> <p>Experiments</p> <p>Investigations</p>	
2		Mechanics and Thermal Physics		<p>Introduction to Physics</p> <p>Meaning of Physics as a body of knowledge in science, Branches of Physics as a field of study (<i>mechanics, electricity &amp; magnetism, thermodynamics, geometrical optics, waves, electronics, modern physics, astronomy</i>)</p>	<p>By the end of the lesson, the learner should be able to:</p> <ul style="list-style-type: none"> <li>a) Outline the importance of physics in day-to-day life.</li> <li>b) Identify possible career opportunities in the field of Physics.</li> <li>c) Relate Physics to other fields of study.</li> <li>d) Appreciate the importance of</li> </ul>	<p>In groups, learners are guided to discuss with peers the relationship of Physics with other fields of study.</p> <p>As a class, learners are guided to engage resource person(s) or use print or non-print media to search for information on career opportunities in the field of Physics.</p> <p>In groups, learners are guided to design, produce and present career charts highlighting areas related to Physics.</p>	How is Physics relevant in day-to-day life?	<p>Physics Curriculum Design Grade 10</p> <p>Laboratory Apparatus and Equipment</p> <p>Textbooks</p> <p>Models</p> <p>Digital media Print media (charts, pictures, journals, magazines)</p> <p>Digital Devices</p> <p>Software</p> <p>Recordings</p> <p>Resource persons</p>	<p>Project Journals</p> <p>Portfolio</p> <p>Oral or Aural Question(s)s</p> <p>Explorations</p> <p>Experiments</p> <p>Investigations</p>	

			Physics in day-to-day life.					
3	Mechanics and Thermal Physics	Pressure in fluids.	<p>By the end of the lesson, the learner should be able to:</p> <ul style="list-style-type: none"> <li>a) Describe atmospheric pressure as used in physics,</li> <li>b) Demonstrate the existence of atmospheric pressure in nature.</li> <li>c) Have a desire to learn more about atmospheric pressure.</li> </ul>	<p>In groups, learners are guided to discuss with peers the meaning of atmospheric pressure.</p> <p>In groups, learners are guided to carry out activities to demonstrate the existence of atmospheric pressure in nature</p>	What is the meaning of atmospheric pressure?	<p>Physics Curriculum Design Grade 10</p> <p>Laboratory Apparatus and Equipment</p> <p>Textbooks</p> <p>Models</p> <p>Digital media</p> <p>Print Media</p> <p>Digital Devices</p> <p>Software</p>	<p>Project Journals</p> <p>Portfolio</p> <p>Oral or Aural Question(s)</p> <p>Explorations</p> <p>Experiments</p> <p>Investigations</p>	
4	Mechanics and Thermal Physics	Pressure in fluids.	<p>By the end of the lesson, the learner should be able to:</p> <ul style="list-style-type: none"> <li>a) Describe atmospheric pressure as used in physics,</li> <li>b) Demonstrate the existence of atmospheric pressure in nature.</li> <li>c) Have a desire to learn more about atmospheric pressure.</li> </ul>	<p>In groups, learners are guided to discuss with peers the meaning of atmospheric pressure.</p> <p>In groups, learners are guided to carry out activities to demonstrate the existence of atmospheric pressure in nature</p>	What is the meaning of atmospheric pressure?	<p>Physics Curriculum Design Grade 10</p> <p>Laboratory Apparatus and Equipment</p> <p>Textbooks</p> <p>Models</p> <p>Digital media</p> <p>Print Media</p> <p>Digital Devices</p> <p>Software</p> <p>Recordings</p>	<p>Project Journals</p> <p>Portfolio</p> <p>Oral or Aural Question(s)</p> <p>Explorations</p> <p>Experiments</p> <p>Investigations</p>	
5	Mechanics and Thermal Physics	Pressure in fluids.	<p>By the end of the lesson, the learner should be able to:</p> <ul style="list-style-type: none"> <li>a) Explain the factors affecting</li> </ul>	<p>In groups, learners are guided to carry out activities to investigate and demonstrate factors affecting pressure in fluids.</p> <p>In groups, learners are guided to carry out experiments to derive and</p>	Which are the factors affecting pressure in fluids.	<p>Physics Curriculum Design Grade 10</p> <p>Laboratory Apparatus and Equipment</p> <p>Textbooks</p> <p>Models</p>	<p>Project Journals</p> <p>Portfolio</p> <p>Oral or Aural Question(s)</p> <p>Explorations</p> <p>Experiments</p> <p>Investigations</p>	

			<p>pressure in fluids.</p> <p>b) Apply the equation <math>P = \rho gh</math> to determine pressure in fluids.</p> <p>c) Appreciate the factors affecting pressure in fluids</p>	<p>use the equation <math>P = \rho gh</math> to determine pressure in fluid.</p>		<p>Digital media Print Media Digital Devices</p>		
2	1	Mechanics and Thermal Physics	Pressure in fluids.	<p>By the end of the lesson, the learner should be able to:</p> <p>a) Explain the factors affecting pressure in fluids.</p> <p>b) Apply the equation <math>P = \rho gh</math> to determine pressure in fluids.</p> <p>c) Appreciate the factors affecting pressure in fluids.</p>	<p>In groups, learners are guided to carry out activities to investigate and demonstrate factors affecting pressure in fluids.</p> <p>In groups, learners are guided to carry out experiments to derive and use the equation <math>P = \rho gh</math> to determine pressure in fluid.</p>	<p>Which are the factors affecting pressure in fluids.</p>	<p>Physics Curriculum Design Grade 10</p> <p>Laboratory Apparatus and Equipment</p> <p>Textbooks</p> <p>Models</p> <p>Digital media Print Media Digital Devices</p>	<p>Project Journals</p> <p>Portfolio</p> <p>Oral or Aural Question(s)</p> <p>Explorations</p> <p>Experiments</p> <p>Investigations</p>
2		Mechanics and Thermal Physics	Pressure in fluids.	<p>By the end of the lesson, the learner should be able to:</p> <p>a) Explain the Mechanisms of water pumping.</p> <p>b) Demonstrate transmission of pressure in fluids.</p> <p>c) Appreciate the applications of atmospheric pressure and transmission of</p>	<p>In groups, learners are guided to explain the Mechanisms of water pumping.</p> <p>In groups, learners are guided to demonstrate transmission of pressure in fluids.</p>	<p>How does density of fluid, acceleration due to gravity and depth below the free surface affect pressure in fluid?</p>	<p>Physics Curriculum Design Grade 10</p> <p>Laboratory Apparatus and Equipment</p> <p>Textbooks</p> <p>Models</p> <p>Digital media Print media Digital Devices</p> <p>Software</p> <p>Recordings</p>	<p>Project Journals</p> <p>Portfolio</p> <p>Oral or Aural Question(s)</p> <p>Explorations</p> <p>Experiments</p> <p>Investigations</p>

			pressure in fluids in day-to-day life.				
3	Mechanics and Thermal Physics	Pressure in fluids.	<p>By the end of the lesson, the learner should be able to:</p> <ul style="list-style-type: none"> <li>a) Explain the Mechanisms of water pumping.</li> <li>b) Demonstrate transmission of pressure in fluids.</li> <li>c) Appreciate the applications of atmospheric pressure and transmission of pressure in fluids in day-to-day life.</li> </ul>	<p>In groups, learners are guided to explain the Mechanisms of water pumping.</p> <p>In groups, learners are guided to demonstrate transmission of pressure in fluids.</p>	<p>How does density of fluid, acceleration due to gravity and depth below the free surface affect pressure in fluid?</p>	<p>Physics Curriculum Design Grade 10</p> <p>Laboratory Apparatus and Equipment</p> <p>Textbooks</p> <p>Models</p> <p>Digital media Print media</p> <p>Digital Devices Software</p> <p>Recordings</p> <p>Resource persons</p>	<p>Project Journals Portfolio Oral or Aural Question(s)s Explorations Experiments Investigations</p>
4	Mechanics and Thermal Physics	Pressure in fluids.	<p>By the end of the lesson, the learner should be able to:</p> <ul style="list-style-type: none"> <li>a) Discuss with peers the transmission of pressure in fluid.</li> <li>b) Carry out activities to demonstrate the principle of transmission of pressure in fluids and relate with the fluid pressure formula.</li> <li>c) Appreciate the applications of atmospheric pressure and transmission of</li> </ul>	<p>In groups, learners are guided to discuss with peers the transmission of pressure in fluid.</p> <p>In groups, learners are guided to carry out activities to demonstrate the principle of transmission of pressure in fluids and relate with the fluid pressure formula.</p>	<p>How does density of fluid, acceleration due to gravity and depth below the free surface affect pressure in fluid?</p>	<p>Physics Curriculum Design Grade 10</p> <p>Laboratory Apparatus and Equipment</p> <p>Textbooks</p> <p>Models</p> <p>Digital media Print media</p> <p>Digital Devices Software</p> <p>Recordings</p> <p>Resource persons</p>	<p>Project Journals Portfolio Oral or Aural Question(s)s Explorations Experiments Investigations</p>

			pressure in fluids in day-to-day life.					
5	Mechanics and Thermal Physics	Pressure in fluids.	<p>By the end of the lesson, the learner should be able to:</p> <ul style="list-style-type: none"> <li>a) Discuss with peers the transmission of pressure in fluid.</li> <li>b) Carry out activities to demonstrate the principle of transmission of pressure in fluids and relate with the fluid pressure formula.</li> <li>c) Appreciate the applications of atmospheric pressure and transmission of pressure in fluids in day-to-day life.</li> </ul>	<p>In groups, learners are guided to discuss with peers the transmission of pressure in fluid.</p> <p>In groups, learners are guided to carry out activities to demonstrate the principle of transmission of pressure in fluids and relate with the fluid pressure formula.</p>	<p>How does density of fluid, acceleration due to gravity and depth below the free surface affect pressure in fluid?</p>	<p>Physics Curriculum Design Grade 10</p> <p>Laboratory Apparatus and Equipment</p> <p>Textbooks</p> <p>Models</p> <p>Digital media Print media (charts, pictures, journals, magazines)</p> <p>Digital Devices</p> <p>Software</p> <p>Recordings</p> <p>Resource persons</p>	<p>Project Journals Portfolio Oral or Aural Question(s)s Explorations Experiments Investigations</p>	
3	1	Mechanics and Thermal Physics	Pressure in fluids.	<p>By the end of the lesson, the learner should be able to:</p> <ul style="list-style-type: none"> <li>a) Discuss with peers the applications of atmospheric pressure and transmission of pressure in fluids in day-to-day life.</li> <li>b) Use print or non-print media to search for more information on the applications of atmospheric</li> </ul>	<p>In groups, learners are guided to discuss with peers the applications of atmospheric pressure and transmission of pressure in fluids in day-to-day life.</p> <p>In groups, learners are guided to use print or non-print media to search for more information on the applications of atmospheric pressure and transmission of pressure in fluids in day-to-day life.</p>	<p>How does density of fluid, acceleration due to gravity and depth below the free surface affect pressure in fluid?</p>	<p>Physics Curriculum Design Grade 10</p> <p>Laboratory Apparatus and Equipment</p> <p>Textbooks</p> <p>Models</p> <p>Digital media Print media (charts, pictures, journals, magazines)</p> <p>Digital Devices</p> <p>Software</p> <p>Recordings</p> <p>Resource persons</p>	<p>Project Journals Portfolio Oral or Aural Question(s)s Explorations Experiments Investigations</p>

			c) pressure and transmission of pressure in fluids in day-to-day life.				
2	Mechanics and Thermal Physics	Pressure in fluids.	By the end of the lesson, the learner should be able to:  a) Discuss with peers the applications of atmospheric pressure and transmission of pressure in fluids in day-to-day life.  b) Use print or non-print media to search for more information on the applications of atmospheric pressure and transmission of pressure in fluids in day-to-day life.  c) Appreciate the applications of atmospheric pressure and transmission of pressure in fluids in day-to-day life.	In groups, learners are guided to discuss with peers the applications of atmospheric pressure and transmission of pressure in fluids in day-to-day life.  In groups, learners are guided to use print or non-print media to search for more information on the applications of atmospheric pressure and transmission of pressure in fluids in day-to-day life.	How does density of fluid, acceleration due to gravity and depth below the free surface affect pressure in fluid?	Physics Curriculum Design Grade 10  Laboratory Apparatus and Equipment  Textbooks  Models  Digital media Print media (charts, pictures, journals, magazines)  Digital Devices  Software  Recordings  Resource persons	Project Journals  Portfolio  Oral or Aural Question(s)  Explorations  Experiments  Investigations
3	Mechanics and	Mechanical Properties of Materials	By the end of the lesson, the learner should be able to:	In groups, learners are guided to discuss with peers the mechanical	Which are some of the mechanical	Physics Curriculum Design Grade 10	Project Journals  Portfolio

	Thermal Physics		<p>a) Discuss with peers the mechanical properties of locally available materials.</p> <p>b) Carry out activities to demonstrate the mechanical properties (ductility, malleability, elasticity, brittleness, strength, hardness, stiffness and any other relevant and appropriate property) of locally available materials.</p> <p>c) Have a desire to learn more about mechanical properties of materials.</p>	<p>properties of locally available materials.</p> <p>As a class, learners are guided to carry out activities to demonstrate the mechanical properties (ductility, malleability, elasticity, brittleness, strength, hardness, stiffness and any other relevant and appropriate property) of locally available materials.</p>	properties of materials?	<p>Laboratory Apparatus and Equipment</p> <p>Textbooks</p> <p>Models</p> <p>Digital media Print media (charts, pictures, journals, magazines)</p> <p>Digital Devices</p> <p>Software</p> <p>Recordings</p> <p>Resource persons</p>	Oral or Aural Question(s)s	Explorations	Experiments	Investigations		
4	Mechanics and Thermal Physics	Mechanical Properties of Materials	<p>By the end of the lesson, the learner should be able to:</p> <p>a) Discuss with peers the mechanical properties of locally available materials.</p> <p>b) Carry out activities to demonstrate the mechanical properties (ductility, malleability,</p>	<p>In groups, learners are guided to discuss with peers the mechanical properties of locally available materials.</p> <p>As a class, learners are guided to carry out activities to demonstrate the mechanical properties (ductility, malleability, elasticity, brittleness, strength, hardness, stiffness and any other relevant and appropriate property) of locally available materials.</p>	Which are some of the mechanical properties of materials?	<p>Physics Curriculum Design Grade 10</p> <p>Laboratory Apparatus and Equipment</p> <p>Textbooks</p> <p>Models</p> <p>Digital media Print media (charts, pictures, journals, magazines)</p> <p>Digital Devices</p> <p>Software</p> <p>Recordings</p> <p>Resource persons</p>	Project Journals	Portfolio	Oral or Aural Question(s)s	Explorations	Experiments	Investigations

			<p>elasticity, brittleness, strength, hardness, stiffness and any other relevant and appropriate property) of locally available materials.</p> <p>c) Have a desire to learn more about mechanical properties of materials.</p>				
5	Mechanics and Thermal Physics	Mechanical Properties of Materials	<p>By the end of the lesson, the learner should be able to:</p> <p>a) Carry out activities to determine the relationship between tensile force and extension to illustrate mechanical properties of materials.</p> <p>b) Use digital devices to search for industrial applications of various mechanical properties of materials.</p> <p>c) Appreciate the relationship between tensile force and extension to illustrate mechanical</p>	<p>As a class, learners are guided to carry out activities to determine the relationship between tensile force and extension to illustrate mechanical properties of materials: <i>constant of elasticity, tensile stress, breaking stress, tensile strain and modulus of elasticity as used in different materials.</i></p> <p>As a class, learners are guided to use digital devices to search for industrial applications of various mechanical properties of materials</p>	<p>Why does a string snap easily as compared to a spring?</p>	<p>Physics Curriculum Design Grade 10</p> <p>Laboratory Apparatus and Equipment</p> <p>Textbooks</p> <p>Models</p> <p>Digital media</p> <p>Print media (charts, pictures, journals, magazines)</p> <p>Digital Devices</p> <p>Software</p> <p>Recordings</p> <p>Resource persons</p>	<p>Project Journals</p> <p>Portfolio</p> <p>Oral or Aural Question(s)</p> <p>Explorations</p> <p>Experiments</p> <p>Investigations</p>

			properties of materials.					
4	1	Mechanics and Thermal Physics	Mechanical Properties of Materials	<p>By the end of the lesson, the learner should be able to:</p> <ul style="list-style-type: none"> <li>a) Carry out activities to determine the relationship between tensile force and extension to illustrate mechanical properties of materials.</li> <li>b) Use digital devices to search for industrial applications of various mechanical properties of materials.</li> <li>c) Appreciate the relationship between tensile force and extension to illustrate mechanical properties of materials.</li> </ul>	<p>As a class, learners are guided to carry out activities to determine the relationship between tensile force and extension to illustrate mechanical properties of materials: <i>constant of elasticity, tensile stress, breaking stress, tensile strain and modulus of elasticity as used in different materials.</i></p> <p>As a class, learners are guided to use digital devices to search for industrial applications of various mechanical properties of materials</p>	<p>Why does a string snap easily as compared to a spring?</p>	<p>Physics Curriculum Design Grade 10 Laboratory Apparatus and Equipment Textbooks Models Digital media Print media (charts, pictures, journals, magazines) Digital Devices Software Recordings Resource persons</p>	<p>Project Journals Portfolio Oral or Aural Question(s)s Explorations Experiments Investigations</p>
2		Mechanics and Thermal Physics	Mechanical Properties of Materials	<p>By the end of the lesson, the learner should be able to:</p> <ul style="list-style-type: none"> <li>a) Describe applications of mechanical properties of materials.</li> </ul>	<p>In groups, learners are guided to describe applications of mechanical properties of materials.</p> <p>In groups, learners are guided to use mathematical relationships to determine tensile stress, tensile strain and modulus of elasticity of materials.</p>	<p>Why is it important to study the mechanical properties of materials?</p>	<p>Physics Curriculum Design Grade 10 Laboratory Apparatus and Equipment Textbooks Models Digital media Print media (charts,</p>	<p>Project Journals Portfolio Oral or Aural Question(s)s Explorations Experiments Investigations</p>

			<p>b) Use mathematical relationships to determine tensile stress, tensile strain and modulus of elasticity of materials.</p> <p>c) Appreciate the importance of knowledge on mechanical properties of materials in day to day life.</p>	$Stress = F/A$ $Strain = \Delta L/L_0$ $Y = \text{strain/strain}$		<p>pictures, journals, magazines)</p> <p>Digital Devices</p> <p>Software</p> <p>Recordings</p> <p>Resource persons</p>		
3	Mechanics and Thermal Physics	Mechanical Properties of Materials	<p>By the end of the lesson, the learner should be able to:</p> <p>a) Describe applications of mechanical properties of materials.</p> <p>b) Use mathematical relationships to determine tensile stress, tensile strain and modulus of elasticity of materials.</p> <p>c) Appreciate the importance of knowledge on mechanical properties of materials in day to day life.</p>	<p>In groups, learners are guided to describe applications of mechanical properties of materials.</p> <p>In groups, learners are guided to use mathematical relationships to determine tensile stress, tensile strain and modulus of elasticity of materials.</p> $Stress = F/A$ $Strain = \Delta L/L_0$ $Y = \text{strain/strain}$	<p>Why is it important to study the mechanical properties of materials?</p>	<p>Physics Curriculum Design Grade 10</p> <p>Laboratory Apparatus and Equipment</p> <p>Textbooks</p> <p>Models</p> <p>Digital media</p> <p>Print media (charts, pictures, journals, magazines)</p> <p>Digital Devices</p> <p>Software</p> <p>Recordings</p> <p>Resource persons</p>	<p>Project Journals</p> <p>Portfolio</p> <p>Oral or Aural Question(s)</p> <p>Explorations</p> <p>Experiments</p> <p>Investigations</p>	

4	Mechanics and Thermal Physics	Temperature and Thermal Expansion	<p>By the end of the lesson, the learner should be able to:</p> <ol style="list-style-type: none"> <li>Discuss the meaning of temperature.</li> <li>Carry out activities to measure temperature using different temperature measurement technologies.</li> <li>Have a desire to learn more about temperature.</li> </ol>	<p>In groups, learners are guided to discuss the meaning of temperature.</p>	<p>In groups, learners are guided to carry out activities to measure temperature using different temperature measurement technologies (<i>liquid expansion devices, bimetallic devices, thermocouples, resistive temperature devices (RTDs, thermistors), infrared radiators, molecular change-of-state and silicon diodes, motion sensors</i>)</p>	<p>What is the meaning of temperature?</p>	<p>Physics Curriculum Design Grade 10 Laboratory Apparatus and Equipment Textbooks Models Digital media Print media (charts, pictures, journals, magazines) Digital Devices Software</p>	<p>Project Journals Portfolio Oral or Aural Question(s)s Explorations Experiments Investigations</p>	
5	Mechanics and Thermal Physics	Temperature and Thermal Expansion	<p>By the end of the lesson, the learner should be able to:</p> <ol style="list-style-type: none"> <li>Use digital media to search for more information on measuring temperature using different temperature measurement technologies (<i>liquid expansion devices, bimetallic devices, thermocouples, resistive temperature devices (RTDs, thermistors), infrared radiators, molecular change-of-state and silicon diodes, motion sensors</i>)</li> <li>Carry out activities to demonstrate thermal expansion and contraction in solids and determine linear expansively of metals (<i>iron, steel, copper, aluminum wire</i>)</li> <li>Appreciate measuring temperature using</li> </ol>	<p>In groups, learners are guided to use digital media to search for more information on measuring temperature using different temperature measurement technologies (<i>liquid expansion devices, bimetallic devices, thermocouples, resistive temperature devices (RTDs, thermistors), infrared radiators, molecular change-of-state and silicon diodes, motion sensors</i>)</p>	<p>In groups, learners are guided to carry out activities to demonstrate thermal expansion and contraction in solids and determine linear expansively of metals (<i>iron, steel, copper, aluminum wire</i>)</p>	<p>How do you measure temperature?</p>	<p>Physics Curriculum Design Grade 10 Laboratory Apparatus and Equipment Textbooks Models Digital media Print media (charts, pictures, journals, magazines) Digital Devices Software Recordings Resource persons</p>	<p>Project Journals Portfolio Oral or Aural Question(s)s Explorations Experiments Investigations</p>	

				different temperature measurement technologies.					
5	1	Mechanics and Thermal Physics	Temperature and Thermal Expansion	<p>By the end of the lesson, the learner should be able to:</p> <ul style="list-style-type: none"> <li>a) Perform experiments to demonstrate thermal expansion and contraction in fluids.</li> <li>b) Discuss the applications of thermal expansion in day- to-day life.</li> <li>c) Appreciate the applications of thermal expansion in day- to-day life.</li> </ul>	<p>In groups, learners are guided to perform experiments to demonstrate thermal expansion and contraction in fluids (include unusual expansion of water)</p> <p>In groups, learners are guided to discuss the applications of thermal expansion in day- to-day life (<i>thermostat used in electrical devices, flash light/indicator system, construction industries, power lines, bridges, metal work and any other</i>).</p>	<p>How do you perform experiments to demonstrate thermal expansion and contraction in fluids?</p>	<p>Physics Curriculum Design Grade 10</p> <p>Laboratory Apparatus and Equipment</p> <p>Textbooks</p> <p>Models</p> <p>Digital media</p> <p>Print media (charts, pictures, journals, magazines)</p> <p>Digital Devices</p>	<p>Project Journals</p> <p>Portfolio</p> <p>Oral or Aural Question(s)</p> <p>Explorations</p> <p>Experiments</p> <p>Investigations</p>	
	2	Mechanics and Thermal Physics	Temperature and Thermal Expansion	<p>By the end of the lesson, the learner should be able to:</p> <ul style="list-style-type: none"> <li>a) Search for more information from the print or non-print media on the applications of thermal expansion.</li> <li>b) Describe applications of thermal expansion in solids and fluids.</li> <li>c) Appreciate the applications of thermal expansion in day-to-day life.</li> </ul>	<p>In groups, learners are guided to search for more information from the print or non-print media on the applications of thermal expansion (<i>thermostat used in electrical devices, flash light/indicator system, construction industries, power lines, bridges, metal work and any other</i>).</p> <p>In groups, learners are guided to describe applications of thermal expansion in solids and fluids</p>	<p>Why is the lid of a sufuria made wider?</p>	<p>Physics Curriculum Design Grade 10</p> <p>Laboratory Apparatus and Equipment</p> <p>Textbooks</p> <p>Models</p> <p>Digital media</p> <p>Print media (charts, pictures, journals, magazines)</p> <p>Digital Devices</p>	<p>Project Journals</p> <p>Portfolio</p> <p>Oral or Aural Question(s)</p> <p>Explorations</p> <p>Experiments</p> <p>Investigations</p>	

3	Mechanics and Thermal Physics	Temperature and Thermal Expansion	<p>By the end of the lesson, the learner should be able to:</p> <ol style="list-style-type: none"> <li>Search for more information from the print or non-print media on the applications of thermal expansion.</li> <li>Describe applications of thermal expansion in solids and fluids.</li> <li>Appreciate the applications of thermal expansion in day-to-day life.</li> </ol>	<p>In groups, learners are guided to search for more information from the print or non-print media on the applications of thermal expansion.</p> <p>In groups, learners are guided to describe applications of thermal expansion in solids and fluids.</p>	<p>Why does a glass bottle break when the water in it freezes</p>	<p>Physics Curriculum Design Grade 10</p> <p>Laboratory Apparatus and Equipment</p> <p>Textbooks</p> <p>Models</p> <p>Digital media Print media (charts, pictures, journals, magazines)</p> <p>Digital Devices</p> <p>Software</p>	<p>Project Journals</p> <p>Portfolio</p> <p>Oral or Aural Question(s)</p> <p>Explorations</p> <p>Experiments</p> <p>Investigations</p>	
4	Mechanics and Thermal Physics	Moments and equilibrium	<p>By the end of the lesson, the learner should be able to:</p> <ol style="list-style-type: none"> <li>Design and carry out activities to determine the position of centre of gravity of regular and irregular objects.</li> <li>Carry out activities to demonstrate the stability, instability and neutral states of equilibrium of objects.</li> </ol>	<p>In groups, learners are guided to design and carry out activities to determine the position of centre of gravity of regular and irregular objects.</p> <p>In groups, learners are guided to carry out activities to demonstrate the stability, instability and neutral states of equilibrium of objects.</p>	<p>How do you determine the position of centre of gravity of regular and irregular objects?</p>	<p>Physics Curriculum Design Grade 10</p> <p>Laboratory Apparatus and Equipment</p> <p>Textbooks</p> <p>Models</p> <p>Digital media Print media (charts, pictures, journals, magazines)</p> <p>Digital Devices</p> <p>Software</p>	<p>Project Journals</p> <p>Portfolio</p> <p>Oral or Aural Question(s)</p> <p>Explorations</p> <p>Experiments</p> <p>Investigations</p>	

			c) Have a desire to learn more about moments and equilibrium					
5	Mechanics and Thermal Physics	Moments and equilibrium	<p>By the end of the lesson, the learner should be able to:</p> <ul style="list-style-type: none"> <li>a) Discuss the meaning of moments of a force.</li> <li>b) Carry out activities to demonstrate the turning effect of forces about point.</li> <li>c) Have a desire to learn more about force.</li> </ul>	<p>In groups, learners are guided to discuss the meaning of moments of a force.</p> <p>In groups, learners are guided to carry out activities to demonstrate the turning effect of forces about point.</p>	What is a force?	<p>Physics Curriculum Design Grade 10</p> <p>Laboratory Apparatus and Equipment</p> <p>Textbooks</p> <p>Models</p> <p>Digital media</p>	<p>Project Journals</p> <p>Portfolio</p> <p>Oral or Aural Question(s)</p> <p>Explorations</p> <p>Experiments</p> <p>Investigations</p>	
6	1	Mechanics and Thermal Physics	<p>By the end of the lesson, the learner should be able to:</p> <ul style="list-style-type: none"> <li>a) Demonstrate moment about two points of support.</li> <li>b) Carry out activities to demonstrate and determine resolution of forces.</li> <li>c) Appreciate the resolution of forces.</li> </ul>	<p>In groups, learners are guided to carry out activities to demonstrate moment about two points of support.</p> <p>In groups, learners are guided to carry out activities to demonstrate and determine resolution of forces.</p>	How do you demonstrate and determine resolution of forces?	<p>Physics Curriculum Design Grade 10</p> <p>Laboratory Apparatus and Equipment</p> <p>Textbooks</p> <p>Models</p> <p>Digital media</p> <p>Print media</p>	<p>Project Journals</p> <p>Portfolio</p> <p>Oral or Aural Question(s)</p> <p>Explorations</p> <p>Experiments</p> <p>Investigations</p>	
	2	Mechanics and Thermal Physics	Moments and equilibrium	By the end of the lesson, the learner should be able to:	In groups, learners are guided to carry out activities to demonstrate torque and couple.	How do you determine moment of	Physics Curriculum Design Grade 10	Project Journals Portfolio

			<ul style="list-style-type: none"> <li>a) Determine moment of force about a point.</li> <li>b) Verify the principle of moments in turning of objects.</li> <li>c) Appreciate the mathematical relationships to determine centre of gravity and moments.</li> </ul>	<p>In groups, learners are guided to use mathematical relationships to determine centre of gravity and moments.</p>	<p>force about a point?</p>	<p>Laboratory Apparatus and Equipment Textbooks Models Digital media Print media</p>	<p>Oral or Aural Question(s)s Explorations Experiments Investigations</p>	
3	Mechanics and Thermal Physics	Moments and equilibrium	<p>By the end of the lesson, the learner should be able to:</p> <ul style="list-style-type: none"> <li>a) Describe torque and couple in turning objects.</li> <li>b) Carry out activities to investigate the factors that affect stability of objects.</li> <li>c) Appreciate the applications of moments and stability in day to day life.</li> </ul>	<p>In groups, learners are guided to carry out activities to investigate the factors that affect stability of objects.</p> <p>In groups, learners are guided to use print or non-print media to search for the applications of torque, couples and stability of bodies</p>	<p>How does the stability of bodies affect the designs of their structures?</p>	<p>Physics Curriculum Design Grade 10  Laboratory Apparatus and Equipment Textbooks Models Digital media Print Media Digital Devices Software Recordings</p>	<p>Project Journals Portfolio Oral or Aural Question(s)s Explorations Experiments Investigations</p>	
4	Mechanics and Thermal Physics	Energy, Work, Power and Machines	<p>By the end of the lesson, the learner should be able to:</p> <ul style="list-style-type: none"> <li>a) Explain the meaning of the terms (energy, work, power and machines) as used in physics.</li> </ul>	<p>In groups, learners are guided to discuss with peers and explain the meaning of the terms (energy, work, power and machines) as used in physics.</p> <p>In groups, learners are guided to carry out activities to demonstrate the concepts of energy, work, power and machines.</p>	<p>What is the meaning of energy, work, power and machines?</p>	<p>Physics Curriculum Design Grade 10  Laboratory Apparatus and Equipment Textbooks Models Digital media Print media (charts, pictures, journals, magazines)</p>	<p>Project Journals Portfolio Oral or Aural Question(s)s Explorations Experiments Investigations</p>	

			<ul style="list-style-type: none"> <li>b) Carry out activities to demonstrate the concepts of energy, work, power and machines.</li> <li>c) Have a desire to learn more about energy, work, power and machines.</li> </ul>			Digital Devices		
5	Mechanics and Thermal Physics	Energy, Work, Power and Machines	<p>By the end of the lesson, the learner should be able to:</p> <ul style="list-style-type: none"> <li>a) Perform experiments to demonstrate mechanical energy transformations and forms of potential energy.</li> <li>b) Discuss mechanical energy transformations and forms of potential energy.</li> <li>c) Appreciate mechanical energy transformations and forms of potential energy.</li> </ul>	<p>In groups, learners are guided to perform experiments to demonstrate mechanical energy transformations and forms of potential energy (potential energy to kinetic energy and back, <i>gravitational potential energy and elastic potential energy</i>)</p> <p>Learners to discuss in groups, mechanical energy transformations and forms of potential energy (potential energy to kinetic energy and back, gravitational potential energy and elastic potential energy)</p>	<p>How do you demonstrate mechanical energy transformations and forms of potential energy?</p>	<p>Physics Curriculum Design Grade 10</p> <p>Laboratory Apparatus and Equipment</p> <p>Textbooks</p> <p>Models</p> <p>Digital media</p> <p>Print media (charts, pictures, journals, magazines)</p> <p>Digital Devices</p> <p>Software</p> <p>Recordings</p>	<p>Project Journals</p> <p>Portfolio</p> <p>Oral or Aural</p> <p>Question(s)s</p> <p>Explorations</p> <p>Experiments</p> <p>Investigations</p>	
7	1	Mechanics and Thermal Physics	Energy, Work, Power and Machines	<p>By the end of the lesson, the learner should be able to:</p> <ul style="list-style-type: none"> <li>a) Apply mathematical relationships to</li> </ul>	<p>In groups, learners are guided to apply mathematical relationships to deduce numerical tasks involving kinetic energy, potential energy, work, power, mechanical advantage, velocity ratio and efficiency of simple machine.</p>	<p>How do you apply mathematical relationships to deduce</p>	<p>Physics Curriculum Design Grade 10</p> <p>Laboratory Apparatus and Equipment</p> <p>Textbooks</p> <p>Models</p>	<p>Project Journals</p> <p>Portfolio</p> <p>Oral or Aural</p> <p>Question(s)s</p> <p>Explorations</p> <p>Experiments</p>

			<p>deduce numerical tasks involving kinetic energy, potential energy, work, power, mechanical advantage, velocity ratio and efficiency of simple machine.</p> <p>b) Demonstrate the law of conservation of mechanical energy (using a swinging pendulum, ball thrown upwards, a catapult, bow &amp; arrow)</p> <p>c) Appreciate the mathematical relationships to deduce numerical tasks involving kinetic energy, potential energy, work, power, mechanical advantage, velocity ratio and efficiency of simple machine.</p>	<p>In groups, learners are guided to demonstrate the law of conservation of mechanical energy (using a swinging pendulum, ball thrown upwards, a catapult, bow &amp; arrow)</p>	<p>numerical tasks?</p>	<p>Digital media Print media (charts, pictures, journals, magazines)</p> <p>Digital Devices</p> <p>Software</p> <p>Recordings</p> <p>Resource persons</p>	<p>Investigations</p>	
2	Mechanics and Thermal Physics	Energy, Work, Power and Machines	<p>By the end of the lesson, the learner should be able to:</p> <p>a) Use print or non-print media to search for information on the transformations of mechanical energy and applications of various simple machines in day-to-day life (<i>Levers, inclined plane, pulleys, wheel and axle, gears, hydraulic lift, pulley belt, screw</i>)</p>	<p>In groups, learners are guided to use print or non-print media to search for information on the transformations of mechanical energy and applications of various simple machines in day-to-day life (<i>Levers, inclined plane, pulleys, wheel and axle, gears, hydraulic lift, pulley belt, screw</i>)</p>	<p>How do you apply various simple machines in day-to-day life?</p>	<p>Physics Curriculum Design Grade 10</p> <p>Laboratory Apparatus and Equipment</p> <p>Textbooks</p> <p>Models</p> <p>Digital media Print media (charts,</p>	<p>Project Journals</p> <p>Portfolio</p> <p>Oral or Aural Question(s)</p> <p>Explorations</p> <p>Experiments</p> <p>Investigations</p>	

			<p>of mechanical energy and applications of various simple machines in day-to-day life.</p> <p>b) Search for information on the use of simple machines in the construction of treadmills, elevators, escalators among others.</p> <p>c) Appreciate the transformations of mechanical energy.</p>	<p>In groups, learners are guided to use print or non-print media to search for information on the use of simple machines in the construction of treadmills, elevators, escalators among others.</p>		<p>pictures, journals, magazines)</p> <p>Digital Devices</p> <p>Software</p> <p>Recordings</p> <p>Resource persons</p>		
3	Mechanics and Thermal Physics	Energy, Work, Power and Machines	<p>By the end of the lesson, the learner should be able to:</p> <p>a) Describe applications of simple machines in making work easier.</p> <p>b) Use locally available materials to construct various simple machines.</p> <p>c) Appreciate the applications of machines in day-to-day life.</p>	<p>In groups, learners are guided to describe applications of simple machines in making work easier</p> <p>In groups, learners are guided to work with others and use locally available materials to construct various simple machines.</p>	<p>How do machines make work easier?</p>	<p>Physics Curriculum Design Grade 10</p> <p>Laboratory Apparatus and Equipment</p> <p>Textbooks</p> <p>Models</p> <p>Digital media</p> <p>Print media (charts, pictures, journals, magazines)</p>	<p>Project Journals</p> <p>Portfolio</p> <p>Oral or Aural Question(s)</p> <p>Explorations</p> <p>Experiments</p> <p>Investigations</p>	
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<b>10</b>	<b>1</b>							Project Journals Portfolio Oral or Aural Question(s)s Explorations Experiments Investigations	
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							Portfolio Oral or Aural Question(s)s Explorations Experiments Investigations	
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<b>11</b>	<b>1</b>						Project Journals Portfolio Oral or Aural Question(s)s Explorations Experiments Investigations	
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	5							Project Journals Portfolio Oral or Aural Question(s) Explorations Experiments Investigations	