× ×	ISN	strand	Sub-strand	Specific Learning Outcomes	Key Inquiry Question(s)	Learning Experiences	Learning Resources	Assessment Methods	Refl
1	1	FOUNDAT IONS OF PRE- TECHNIC AL STUDIES	Safety on Raised Platforms – types of raised platforms (ladders & trestles)	By the end of the lesson, the learner should be able to: a) identify types of raised platforms used in performing tasks, b) Explore the use of ladders and trestles c) appreciate working with raised platforms.	What is the importance of observing safety when working on raised platforms?	The learner is guided to:  • walk around the school to explore types of raised platforms (ladders, trestles),  • brainstorm on the types of raised platforms used in day-to-day life,	<ul> <li>Raised platforms</li> <li>Video clips and visual aids</li> <li>Personal protective equipment (PPEs) Distinction</li> <li>Pretech. Studies</li> <li>Grade 9 P.B. Pg.1-4</li> </ul>	Oral tests Observation Checklist Written test Rubrics Practical work	
	2		types of raised platforms (steps & work benches)	By the end of the lesson, the learner should be able to: a) identify types of raised platforms used in performing tasks, b) Explore the use of steps and work benches. c) appreciate working with raised platforms.	What is the importance of observing safety when working on raised platforms?	The learner is guided to:  • walk around the school to explore types of raised platforms (steps, work benches),  • brainstorm on the types of raised platforms used in day-to-day life,	<ul> <li>Raised platforms</li> <li>Video clips and visual aids</li> <li>Personal protective equipment (PPEs) Distinction</li> <li>Pretech. Studies</li> <li>Grade 9 P.B. Pg.1-4</li> </ul>	Oral tests Observation Checklist Written test Rubrics Practical work	
	3		types of raised platforms (ramps & stands)	By the end of the lesson, the learner should be able to: a) identify types of raised platforms used in performing tasks, b) Explore the use of ramps and stands. c) appreciate working with raised platforms.	What is the importance of observing safety when working on raised platforms?	The learner is guided to:  • walk around the school to explore types of raised platforms ( stands, ramps),  • brainstorm on the types of raised platforms used in day-to-day life,	<ul> <li>Raised platforms</li> <li>Video clips and visual aids</li> <li>Personal protective equipment (PPEs) Distinction Pretech. Studies Grade 9 P.B. Pg.1-4</li> </ul>	Oral tests Observation Checklist Written test Rubrics Practical work	

× ×	rsn	strand	Sub-strand	Specific Learning Outcomes	Key Inquiry Question(s)	Learning Experiences	Learning Resources	Assessment Methods	Refl
	4		types of raised platforms (scaffolding & cradles platforms)	By the end of the lesson, the learner should be able to: a) identify types of raised platforms used in performing tasks, b) Explore the use of scaffolding and cradle platforms. c) appreciate working with raised platforms.	What is the importance of observing safety when working on raised platforms?	The learner is guided to:  • walk around the school to explore types of raised platforms (mobile raised platforms),  • brainstorm on the types of raised platforms used in day-to-day life,	<ul> <li>Raised platforms</li> <li>Video clips and visual aids</li> <li>Personal protective equipment (PPEs) Distinction</li> <li>Pretech. Studies</li> <li>Grade 9 P.B. Pg.1-4</li> </ul>	Oral tests Observation Checklist Written test Rubrics Practical work	
2	1		Risks associated with working on raised platforms	By the end of the lesson, the learner should be able to: a) describe risks associated with working on raised platforms, b) examine how to minimize the risks associated with working on raised platforms. c) appreciate working with raised platforms.	What is the importance of observing safety when working on raised platforms?	The learner is guided to:  • use print or digital media to search for information on risks associated with working on raised platforms,  • discuss ways of minimizing risks related to working on raised platforms,	<ul> <li>Raised platforms</li> <li>Video clips and visual aids</li> <li>Personal protective equipment (PPEs) Distinction</li> <li>Pretech. Studies</li> <li>Grade 9 P.B. Pg.5-8</li> </ul>	Oral tests Observation Checklist Written test Rubrics Practical work	
	2		Risks associated with working on raised platforms	By the end of the lesson, the learner should be able to: a) describe risks associated with working on raised platforms, b) examine how to minimize the risks associated with working on raised platforms. c) appreciate working with raised platforms.	What is the importance of observing safety when working on raised platforms?	The learner is guided to:  • use print or digital media to search for information on risks associated with working on raised platforms,  • discuss ways of minimizing risks related to working on raised platforms,	<ul> <li>Raised platforms</li> <li>Video clips and visual aids</li> <li>Personal protective equipment (PPEs) Distinction</li> <li>Pretech. Studies</li> <li>Grade 9 P.B. Pg.5-8</li> </ul>	Oral tests Observation Checklist Written test Rubrics Practical work	

			Safety when	By the end of the lesson, the learner	What is the	The learner is guided to:	Raised platforms	• Oral tests	
	3		working on	should be able to:		<ul><li>visit the locality to observe safety</li></ul>	Video clips and	Observation	
			raised		importance of observing	precautions taken when working on	visual aids	Checklist	
				3 1	U	F			
			platforms	when working with raised	safety when	raised platforms.	Personal protective     PREs	• Written test	
				platforms.	working on raised		equipment (PPEs) Distinction	• Rubrics	
				b) observe safety when working on				Practical	
				raised platforms,	platforms?		Pretech. Studies	work	
				c) appreciate working with raised			Grade 9 P.B. Pg.8-		
				platforms.	W. 1 *.		11	A	5.0
×	SN	strand	Sub-strand	Specific Learning Outcomes	Key Inquiry Question(s)	Learning Experiences	Learning Resources	Assessment Methods	Refl
3			N. 16	D (1 1 (1 1 (1 1		ml-1	D-111		
	4		Need for	By the end of the lesson, the learner	What is the	The learner is guided to:	Raised platforms	• Oral tests	
			observing	should be able to:	importance of	role-play safety practices for	Video clips and	Observation	
			safety	a) identify the safety precautions	observing	working on raised platforms,	visual aids	Checklist	
				when working with raised	safety when		Personal protective	• Written test	
				platforms.	working on		equipment (PPEs)	• Rubrics	
				b) Role play the safety precautions	raised		Distinction Pretech.	• Practical	
				when working on raised	platforms?		Studies Grade 9 P.B.	work	
				platforms.			Pg.11-12		
				c) appreciate the need for observing					
				safety while working on raised					
				platforms.					
3	1	Handling	Identifying	By the end of the lesson, the learner	1. Why are	The learner is guided to:	• Local work places	• Oral tests	
		Hazardous	hazardous	should be able to:	hazardous	use print or digital media to	Personal protective	<ul> <li>Observation</li> </ul>	
		Substance	substances	a) identify hazardous substances	substances	search for information on	equipment (PPEs)	<ul> <li>Checklist</li> </ul>	
		s	found in the	found in the environment,	labelled?	hazardous substances (poisonous,	Safety labels and	• Written test	
			immediate	b) Observe pictures of hazardous	2. How are	flammable, corrosive),	manuals • Charts	• Rubrics	
			environment	substances.	hazardous		Distinction Pretech.	• Practical	
				c) Develop curiosity in safe use of	substances		Studies Grade 9 P.B.	work	
				hazardous substances.	handled?		Pg.13-15		

2	Classification of hazardous substances - Poisonous	By the end of the lesson, the learner should be able to: a) Describe a poisonous substance. b) classify hazardous substances found in the locality as poisonous. c) Develop curiosity in safe use of hazardous substances.	hazardous substances labelled?	The learner is guided to:  • explore the environment to identify hazardous substances (poisonous),  • group hazardous substances into poisonous	<ul> <li>Local work places</li> <li>Personal protective equipment (PPEs)</li> <li>Safety labels and manuals • Charts</li> <li>Distinction Pretech.</li> <li>Studies Grade 9 P.B.</li> <li>Pg.16-17</li> </ul>	<ul><li>Oral tests</li><li>Observation</li><li>Checklist</li><li>Written test</li><li>Rubrics</li><li>Practical</li><li>work</li></ul>	
3	Classification of hazardous substances - Corrosive	By the end of the lesson, the learner should be able to: a) Describe a corrosive substance. b) classify hazardous substances found in the locality as corrosive. c) Develop curiosity in safe use of hazardous substances.	hazardous substances labelled? 2. How are	The learner is guided to:  • explore the environment to identify hazardous substances (corrosive),  • group hazardous substances into Corrosive.	<ul> <li>Local work places</li> <li>Personal protective equipment (PPEs)</li> <li>Safety labels and manuals • Charts</li> <li>Distinction Pretech.</li> <li>Studies Grade 9 P.B.</li> <li>Pg.16-17</li> </ul>	Oral tests Observation Checklist Written test Rubrics Practical work	

Wk	rsn	strand	Sub-strand	Specific Learning Outcomes	Key Inquiry Question(s)	Learning Experiences	Learning Resources	Assessment Methods	Refl
	4		Classification of hazardous substances - flammable	By the end of the lesson, the learner should be able to:  a) Describe a flammable substance. b) classify hazardous substances found in the locality as flammable. c) Develop curiosity in safe use of hazardous substances.	1. Why are hazardous substances labelled? 2. How are hazardous substances handled?	The learner is guided to:  • explore the environment to identify hazardous substances (flammable),  • group hazardous substances into Flammable.	<ul> <li>Local work places</li> <li>Personal protective equipment (PPEs)</li> <li>Safety labels and manuals</li> <li>Charts</li> <li>Distinction Pretech.</li> <li>Studies Grade</li> <li>Pg.16-17</li> </ul>	<ul><li>Oral tests</li><li>Observation</li><li>Checklist</li><li>Written test</li><li>Rubrics</li><li>Practical work</li></ul>	
4	1		Safe ways of handling hazardous substances – flammable substances	By the end of the lesson, the learner should be able to:  a) describe safe ways of handling flammable substances in the environment,  b) Read and interpret instructions on the conditions for use of hazardous substances.  c) Develop curiosity in safe use of hazardous substances.	1. Why are hazardous substances labelled? 2. How are hazardous substances handled?	The learner is guided to:  • discuss safe ways of handling hazardous substances in the environment,  • read and interpret instructions on the conditions for use of hazardous substances,	<ul> <li>Local work places</li> <li>Personal protective equipment (PPEs)</li> <li>Safety labels and manuals</li> <li>Charts Distinction Pretech. Studies Grade</li> <li>Pg.18</li> </ul>	Oral tests Observation Checklist Written test Rubrics Practical work	
	2		Safe ways of handling hazardous substances – poisonous substances	By the end of the lesson, the learner should be able to:  a) describe safe ways of handling poisonous substances in the environment,  b) Read and interpret instructions on the conditions for use of hazardous substances.  c) Develop curiosity in safe use of hazardous substances.	1. Why are hazardous substances labelled? 2. How are hazardous substances handled?	The learner is guided to:  • discuss safe ways of handling hazardous substances in the environment,  • read and interpret instructions on the conditions for use of hazardous substances,	<ul> <li>Local work places</li> <li>Personal protective equipment (PPEs)</li> <li>Safety labels and manuals</li> <li>Charts Distinction Pretech.</li> <li>Studies Grade</li> <li>Pg.19-20</li> </ul>	Oral tests Observation Checklist Written test Rubrics Practical work	

	3		Safe ways of handling hazardous substances – corrosive substances	By the end of the lesson, the learner should be able to: a) describe safe ways of handling corrosive substances in the environment, b) Read and interpret instructions on the conditions for use of hazardous substances. c) Develop curiosity in safe use of hazardous substances.	1. Why are hazardous substances labelled? 2. How are hazardous substances handled?	The learner is guided to:  • discuss safe ways of handling hazardous substances in the environment,  • read and interpret instructions on the conditions for use of hazardous substances,	<ul> <li>Local work places</li> <li>Personal protective equipment (PPEs)</li> <li>Safety labels and manuals • Charts Distinction Pretech.</li> <li>Studies Grade 9 P.B.</li> <li>Pg.21-23</li> </ul>	Oral tests Observation Checklist Written test Rubrics Practical Work	
Wk	NST	strand	Sub-strand	Specific Learning Outcomes	Key Inquiry Question(s)	Learning Experiences	Learning Resources	Assessment Methods	Refl
	4		Handling hazardous substances safely	By the end of the lesson, the learner should be able to:  a) identify ways of handling hazardous substances.  b) handle hazardous substances safely in the environment,  c) Develop curiosity in safe use of hazardous substances.	1. Why are hazardous substances labelled? 2. How are hazardous substances handled?	The learner is guided to:  • visit the locality to learn about safe handling of poisonous, flammable and corrosive substances,  • practise safe handling of poisonous, flammable and corrosive substances in the environment,	Local work places     Personal protective equipment (PPEs)     Safety labels and manuals    Charts     Distinction Pretech.     Studies Grade 9 P.B.     Pg.24	Oral tests Observation Checklist Written test Rubrics Practical work	
5	1		Importance of observing safety when handling hazardous substances	By the end of the lesson, the learner should be able to: a) identify the importance of observing safety when handling hazardous substances. b) Practice handling hazardous substances safely in the environment, c) appreciate the importance of observing safety when handling hazardous substances.	1. Why are hazardous substances labelled? 2. How are hazardous substances handled?	The learner is guided to:  • practise safe handling of poisonous, flammable and corrosive substances in the environment,  • discuss the importance of observing safety when handling hazardous substances.	<ul> <li>Local work places</li> <li>Personal protective equipment (PPEs)</li> <li>Safety labels and manuals</li> <li>Charts Distinction Pretech.</li> <li>Studies Grade</li> <li>Pg.24-26</li> </ul>	Oral tests Observation Checklist Written test Rubrics Practical work	

_	T	1	1		I			1	
	2	Self-	Ways of	By the end of the lesson, the	1. How are	The learner is guided to:	Volunteer resource	• Oral tests	
		Exploration	nurturing	learner should be able to:	talents and	<ul> <li>discuss and present on ways of</li> </ul>	person	Observation	
		and Career	talents and	a) explain ways of nurturing	abilities	nurturing talents and abilities,	<ul> <li>Relevant textbooks</li> </ul>	Checklist	
		Developme	abilities	talents and abilities for self-	nurtured?		and reference	Written test	
		nt		development,	2. Why is self-		materials	• Rubrics	
				b) Observe pictures of various	exploration		<ul> <li>Photographs and</li> </ul>	• Practical	
				talents and abilities.	necessary for		pictures • Charts	work	
					career		Distinction Pretech.		
				c) Develop curiosity in nurturing	development?		Studies Grade 9 P.B.		
				talents and abilities.			Pg.26-29		
	3		Ways of	By the end of the lesson, the learner	1. How are	The learner is guided to:	• Volunteer resource	• Oral tests	
			nurturing	should be able to:	talents and	<ul> <li>display talents and abilities</li> </ul>	person	<ul> <li>Observation</li> </ul>	
			talents and	a) explain ways of nurturing talents	abilities	through clubs and societies and	<ul> <li>Photographs and</li> </ul>	<ul> <li>Checklist</li> </ul>	
			abilities	and abilities for self-development,	nurtured?	other planned school activities,	pictures • Charts	• Written test	
				b) Observe pictures of various			Distinction Pretech.	• Rubrics	
				talents and abilities.			Studies Grade 9 P.B.	• Practical	
				c) Develop curiosity in nurturing			Pg.26-29	work	
				talents and abilities.					
	_	strand	Sub-strand	Specific Learning Outcomes	Key Inquiry	Learning Experiences	Learning Resources	Assessment	Refl
¥	ISN				Question(s)			Methods	
	4		Relationship	By the end of the lesson, the learner	How are	The learner is guided to:	Volunteer resource	• Oral tests	
			between	should be able to:	talents and	<ul> <li>make a list of talents and</li> </ul>	person	Observation	
			talents and	a) explain how talents and abilities	abilities	abilities and their corresponding	<ul> <li>Photographs and</li> </ul>	Checklist	
			abilities to	relate to career pathways.	nurtured?	career pathways,	pictures • Charts	Written test	
			career	b) relate talents and abilities to	2. Why is self-		Distinction Pretech.	• Rubrics	
			pathways	career pathways,	exploration		Studies Grade 9 P.B.	• Practical	
				c) Develop curiosity in nurturing	necessary for		Pg.30-33	work	
				talents and abilities.	career				
					development?				

6	1	Relationship between talents and abilities to career pathways	By the end of the lesson, the learner should be able to: a) explain how talents and abilities relate to career pathways. b) relate talents and abilities to career pathways, c) Develop curiosity in nurturing talents and abilities.	1. How are talents and abilities nurtured? 2. Why is self-exploration necessary for career development?	The learner is guided to:  • engage with a resource person on career opportunities related to talents and abilities,	Volunteer resource person     Photographs and pictures • Charts     Distinction Pretech.     Studies Grade 9 P.B.     Pg.30-33	Oral tests Observation Checklist Written test Rubrics Practical work
	2	Ethics related to the use of talents and abilities	By the end of the lesson, the learner should be able to:  a) Give the ethical and unethical practices related to the use of talents and abilities.  b) analyse ethical and unethical practices related to the use of talents and abilities,  c) Develop curiosity in nurturing talents and abilities.	1. How are talents and abilities nurtured? 2. Why is self-exploration necessary for career development?	The learner is guided to:  • discuss a case scenario on ethical and unethical practices related to the use of talents and abilities,	Volunteer resource person     Photographs and pictures • Charts Distinction Pretech. Studies Grade 9 P.B. Pg.34-36	Oral tests Observation Checklist Written test Rubrics Practical work
	3	Choosing a career based on talents and abilities	By the end of the lesson, the learner should be able to: a) List ways of nurturing talents and abilities for self-development, b) choose a career based on talents and abilities for self-development. c) Develop curiosity in nurturing talents and abilities.	1. How are talents and abilities nurtured? 2. Why is self-exploration necessary for career development?	The learner is guided to:  • make presentations on careers of choice based on talents and abilities.	Volunteer resource person     Photographs and pictures • Charts     Distinction Pretech.     Studies Grade 9 P.B.     Pg.36-37	Oral tests Observation Checklist Written test Rubrics Practical work

Wk	rsn	strand	Sub-strand	Specific Learning Outcomes	Key Inquiry Question(s)	Learning Experiences	Learning Resources	Assessment Methods	Refl
	4	COMMUNI CATION IN PRE- TECHNIC AL STUDIES	Oblique Projection – meaning	By the end of the lesson, the learner should be able to: a) explain the meaning of oblique projection. b) Observe pictures of oblique projection. c) Develop curiosity in using oblique projection in drawing.	How are oblique drawings used in technical fields?	The learner is guided to:  • use print or digital media to search for information on the meaning of oblique projection.	<ul> <li>Drawing papers</li> <li>Pencils</li> <li>Samples of free hand sketches</li> <li>Distinction Pretech.</li> <li>Studies Grade 9 P.B.</li> <li>Pg.38-40</li> </ul>	<ul><li>Oral tests</li><li>Observation</li><li>Checklist</li><li>Written test</li><li>Project</li><li>Practical work</li></ul>	
7	1		characteristic of oblique drawings in technical fields - Horizontal	By the end of the lesson, the learner should be able to: a) explain the characteristics of oblique drawing in technical fields, b) Analyze oblique drawings. c) Develop curiosity in using oblique projection in drawing.	How are oblique drawings used in technical fields?	The learner is guided to:  use print or digital media to search for information on the characteristic of oblique drawings,  brainstorm on the characteristic of oblique drawings,	<ul> <li>Drawing papers</li> <li>Pencils</li> <li>Samples of free hand sketches</li> <li>Distinction Pretech.</li> <li>Studies Grade 9 P.B.</li> <li>Pg.38-40</li> </ul>	Oral tests Observation Checklist Written test Project Practical work	
	2		characteristic of oblique drawings in technical fields - vertical	By the end of the lesson, the learner should be able to:  a) explain the characteristics of oblique drawing in technical fields,  b) Analyze oblique drawings. c) Develop curiosity in using oblique projection in drawing.	How are oblique drawings used in technical fields?	The learner is guided to:  • use print or digital media to search for information on the characteristic of oblique drawings,  • brainstorm on the characteristic of oblique drawings,	<ul> <li>Drawing papers</li> <li>Pencils</li> <li>Samples of free hand sketches</li> <li>Distinction Pretech.</li> <li>Studies Grade 9 P.B.</li> <li>Pg.38-40</li> </ul>	Oral tests Observation Checklist Written test Project Practical work	

	3		characteristic of oblique drawings in technical fields - face	By the end of the lesson, the learner should be able to: a) explain the characteristics of oblique drawing in technical fields, b) Analyze oblique drawings. c) Develop curiosity in using oblique projection in drawing.	How are oblique drawings used in technical fields?	The learner is guided to:  use print or digital media to search for information on the characteristic of oblique drawings,  brainstorm on the characteristic of oblique drawings,	Drawing papers     Pencils     Samples of free hand sketches     Distinction Pretech.     Studies Grade 9 P.B.     Pg.38-40	Oral tests Observation Checklist Written test Project Practical work	
×	ISN	strand	Sub-strand	Specific Learning Outcomes	Key Inquiry Question(s)	Learning Experiences	Learning Resources	Assessment Methods	Refl
	4		Sketching given drawings in oblique projection – on plain paper	By the end of the lesson, the learner should be able to: a) explain how to sketch drawings in oblique projection on plain paper. b) sketch given drawings in oblique projection, c) Develop curiosity in using oblique projection in drawing.	How are oblique drawings used in technical fields?	The learner is guided to:  • discuss the steps for drawing shaped blocks in oblique projection,	<ul> <li>Drawing papers</li> <li>Pencils</li> <li>Samples of free hand sketches</li> <li>Distinction Pretech.</li> <li>Studies Grade 9 P.B.</li> <li>Pg.41</li> </ul>	Oral tests Observation Checklist Written test Project Practical work	
8					HALF	ΓERM			
9	1		Sketching given drawings in oblique projection – on plain paper	By the end of the lesson, the learner should be able to: a) explain how to sketch drawings in oblique projection on plain paper. b) sketch given drawings in oblique projection, c) Develop curiosity in using oblique projection in drawing.	How are oblique drawings used in technical fields?	The learner is guided to:  • discuss the steps for drawing shaped blocks in oblique projection,	<ul> <li>Drawing papers</li> <li>Pencils</li> <li>Samples of free hand sketches</li> <li>Distinction Pretech.</li> <li>Studies Grade 9 P.B.</li> <li>Pg.41</li> </ul>	Oral tests Observation Checklist Written test Project Practical work	

	2		Sketching given drawings in oblique projection – on grid paper	By the end of the lesson, the learner should be able to: a) explain how to sketch drawings in oblique projection on grid paper. b) sketch given drawings in oblique projection on grid paper. c) Develop curiosity in using oblique	oblique	The learner is guided to:  • discuss the steps for drawing shaped blocks in oblique projection,	<ul> <li>Drawing papers</li> <li>Pencils</li> <li>Samples of free hand sketches</li> <li>Distinction Pretech.</li> <li>Studies Grade 9 P.B.</li> <li>Pg.42-44</li> </ul>	Oral tests Observation Checklist Written test Project Practical work	
	3		Sketching given drawings in oblique projection – on grid paper	projection in drawing.  By the end of the lesson, the learner should be able to:  a) explain how to sketch drawings in oblique projection on grid paper.  b) sketch given drawings in oblique projection on grid paper.  c) Develop curiosity in using oblique projection in drawing.	How are oblique drawings used in technical fields?	The learner is guided to:  • discuss the steps for drawing shaped blocks in oblique projection,	<ul> <li>Drawing papers</li> <li>Pencils</li> <li>Samples of free hand sketches</li> <li>Distinction Pretech.</li> <li>Studies Grade 9 P.B.</li> <li>Pg.42-44</li> </ul>	Oral tests Observation Checklist Written test Project Practical work	
W	LSN	strand	Sub-strand	Specific Learning Outcomes	Key Inquiry Question(s)	Learning Experiences	Learning Resources	Assessment Methods	Refl
	4		Drawshaped blocks in oblique projection	By the end of the lesson, the learner should be able to: a) identify how to draw blocks in oblique projection. b) draw shaped blocks in oblique projection, c) Develop curiosity in using oblique projection in drawing.	How are oblique drawings used in technical fields?	The learner is guided to:  • discuss the steps for drawing shaped blocks in oblique projection,	<ul> <li>Drawing papers</li> <li>Pencils</li> <li>Samples of free hand sketches</li> <li>Distinction Pretech.</li> <li>Studies Grade 9 P.B.</li> <li>Pg.45-48</li> </ul>	Oral tests Observation Checklist Written test Project Practical work	

Wk	ISN	strand	Sub-strand	Specific Learning Outcomes	Key Inquiry Question(s)	Learning Experiences	Learning Resources	Assessment Methods	Refl
	3		Classification of oblique projection - cavalier	By the end of the lesson, the learner should be able to: a) explain the two types of oblique projections b) classify oblique projections c) Develop curiosity in using oblique projection in drawing.	How are oblique drawings used in technical fields?	The learner is guided to:  • draw given drawings in oblique projection without using instruments (cavalier and cabinet),  • use geometrical set drawing instruments to draw shaped blocks in oblique projection (cabinet),	<ul> <li>Drawing papers</li> <li>Pencils</li> <li>Samples of free hand sketches</li> <li>Distinction Pretech.</li> <li>Studies Grade 9 P.B.</li> <li>Pg.45-48</li> </ul>	<ul><li>Oral tests</li><li>Observation</li><li>Checklist</li><li>Written test</li><li>Project</li><li>Practical work</li></ul>	
	2		Draw shaped blocks in oblique projection	By the end of the lesson, the learner should be able to: a) identify how to draw blocks in oblique projection. b) draw shaped blocks in oblique projection, c) Develop curiosity in using oblique projection in drawing.	How are oblique drawings used in technical fields?	The learner is guided to:  • discuss the steps for drawing shaped blocks in oblique projection,	<ul> <li>Drawing papers</li> <li>Pencils</li> <li>Samples of free hand sketches</li> <li>Distinction Pretech.</li> <li>Studies Grade 9 P.B.</li> <li>Pg.45-48</li> </ul>	<ul><li>Oral tests</li><li>Observation</li><li>Checklist</li><li>Written test</li><li>Project</li><li>Practical work</li></ul>	
10	1		Draw shaped blocks in oblique projection	By the end of the lesson, the learner should be able to: a) identify how to draw blocks in oblique projection. b) draw shaped blocks in oblique projection, c) Develop curiosity in using oblique projection in drawing.	How are oblique drawings used in technical fields?	The learner is guided to:  • discuss the steps for drawing shaped blocks in oblique projection,	<ul> <li>Drawing papers</li> <li>Pencils</li> <li>Samples of free hand sketches</li> <li>Distinction Pretech.</li> <li>Studies Grade 9 P.B.</li> <li>Pg.45-48</li> </ul>	<ul><li>Oral tests</li><li>Observation</li><li>Checklist</li><li>Written test</li><li>Project</li><li>Practical work</li></ul>	

	4		Classification of oblique projection - Cabinet	By the end of the lesson, the learner should be able to: a) explain the two types of oblique projections b) classify oblique projections c) Develop curiosity in using oblique projection in drawing.	How are oblique drawings used in technical fields?	The learner is guided to:  • draw given drawings in oblique projection without using instruments (cavalier and cabinet),  • use geometrical set drawing instruments to draw shaped blocks in oblique projection (cabinet),	<ul> <li>Drawing papers</li> <li>Pencils</li> <li>Samples of free hand sketches</li> <li>Distinction Pretech.</li> <li>Studies Grade 9 P.B.</li> <li>Pg.45-48</li> </ul>	Oral tests Observation Checklist Written test Project Practical work	
11	1		Application of oblique projection in communicati on	By the end of the lesson, the learner should be able to: a) explain the application of oblique projection in communication b) apply oblique projection in daily communication c) appreciate the application of oblique projection in drawing.	How are oblique drawings used in technical fields?	The learner is guided to:  • walk around the locality to observe the use of oblique drawings.	<ul> <li>Drawing papers</li> <li>Pencils</li> <li>Samples of free hand sketches</li> <li>Distinction Pretech.</li> <li>Studies Grade 9 P.B.</li> <li>Pg.49-51</li> </ul>	Oral tests Observation Checklist Written test Project Practical work	
	2	Visual Programm ing	Meaning of visual programmin g	By the end of the lesson, the learner should be able to: a) explain the meaning of visual programming b) Use IT devices to access visual programming programmes. c) Appreciate the use of visual programme in daily life.	How are applications developed using visual programming software?	The learner is guided to:  • use print or digital media to search for information on meaning of visual programming.	Digital Devices     Manilla Papers     Internet • Video     Clips • Audio Clips     Visual     Programming     Software     Distinction Pretech.     Studies Grade 9 P.B.     Pg.52	<ul><li>Rubrics</li><li>Projects</li><li>Portfolios</li><li>Written Tests</li><li>Observation</li><li>Schedules</li><li>Checklists</li></ul>	

	3		Application areas of visual programmin g software in solving problems	By the end of the lesson, the learner should be able to: a) explain the application areas of visual programming software in solving problems, b) Apply visual programming software in solving problems. c) Appreciate the use of visual programme in daily life.	How are applications developed using visual programming software?	The learner is guided to:  use print or digital media to search for information on the application areas of visual programming,  discuss the application areas of visual programming software,	<ul> <li>Digital Devices</li> <li>Manilla Papers</li> <li>Internet • Video</li> <li>Clips • Audio Clips</li> <li>Visual</li> <li>Programming</li> <li>Software</li> <li>Distinction Pretech.</li> <li>Studies Grade 9 P.B.</li> <li>Pg.53</li> </ul>	<ul><li>Rubrics</li><li>Projects</li><li>Portfolios</li><li>Written Tests</li><li>Observation Schedules</li><li>Checklists</li></ul>	
¥	ISN	strand	Sub-strand	Specific Learning Outcomes	Key Inquiry Question(s)	Learning Experiences	Learning Resources	Assessment Methods	Refl
	4		Creating an application using visual programmin g software for solving problems in daily life	By the end of the lesson, the learner should be able to: a) explain the scratch programme features. b) create an application using visual programming software for solving problems in day-to-day life, c) Appreciate the use of visual programme in daily life.	How are applications developed using visual programming software?	The learner is guided to:  • watch a video on how to develop an application using visual programming software (games, stories and animations),	Digital Devices     Manilla Papers     Internet • Video     Clips • Audio Clips     Visual     Programming     Software     Distinction Pretech.     Studies Grade 9 P.B.     Pg.54	<ul><li>Rubrics</li><li>Projects</li><li>Portfolios</li><li>Written Tests</li><li>Observation Schedules</li><li>Checklists</li></ul>	
12	1		Developing interactive games	By the end of the lesson, the learner should be able to: a) explain the application areas of visual programming software in solving problems, b) create an interactive game using visual programming software c) Appreciate the use of visual programme in daily life.	How are applications developed using visual programming software?	The learner is guided to:  • watch a video on how to develop an application using visual programming software (games, stories and animations),  • develop interactive games using visual programming software,	Digital Devices     Manilla Papers     Internet • Video     Clips • Audio Clips     Visual     Programming     Software     Distinction Pretech.     Studies Grade 9 P.B.     Pg.55	<ul><li>Rubrics</li><li>Projects</li><li>Portfolios</li><li>Written Tests</li><li>Observation Schedules</li><li>Checklists</li></ul>	

		1	1	I	I		1	1	
	2		Developing	By the end of the lesson, the	How are	The learner is guided to:	Digital Devices	• Rubrics	
			interactive	learner should be able to:	applications	<ul> <li>watch a video on how to develop</li> </ul>	• Manilla Papers	• Projects	
			games	a) explain the feature of a scratch	developed	an application using visual	• Internet • Video	• Portfolios	
				programme,	using visual	programming software (games,	Clips • Audio Clips	• Written Tests	
				b) create an interactive game	programming	stories and animations),	• Visual	<ul> <li>Observation</li> </ul>	
				using visual programming	software?	<ul> <li>develop interactive games using visual</li> </ul>	Programming	Schedules	
				software		programming software,	Software	<ul> <li>Checklists</li> </ul>	
							Distinction Pretech.		
				c) Appreciate the use of visual			Studies Grade 9 P.B.		
				programme in daily life.			Pg.55		
		strand	Sub-strand	Specific Learning Outcomes	Key Inquiry	Learning Experiences	Learning Resources	Assessment	Refl
×	ISN				Question(s)		· ·	Methods	
	3		Developing	By the end of the lesson, the	How are	The learner is guided to:	Digital Devices	• Rubrics	
			interactive	learner should be able to:	applications	<ul> <li>watch a video on how to develop</li> </ul>	• Manilla Papers	• Projects	
			games	a) explain the feature of a scratch	developed	an application using visual	• Internet • Video	• Portfolios	
				programme,	using visual	programming software (games,	Clips • Audio Clips	• Written Tests	
				b) create an interactive game	programming	stories and animations),	• Visual	<ul> <li>Observation</li> </ul>	
			1	1 0 1 Grand an interactive saille		<ul> <li>develop interactive games using visual</li> </ul>	D	Schedules	
					software?	• develop interactive garnes using visual	Programming	Scriedules	
				using visual programming	software?	programming software,	Software	• Checklists	
				using visual programming software	software?				
				using visual programming	software?		Software		

	4		Navigating scratch	By the end of the lesson, the learner should be able to: a) Describe the features of a scratch programme b) Navigate and use the various sections of a scratch programme. c) Appreciate the use of visual programme in daily life.	applications developed	The learner is guided to:  use print or digital media to search for information on the features of visual programming,	<ul> <li>Digital Devices</li> <li>Manilla Papers</li> <li>Internet • Video</li> <li>Clips • Audio Clips</li> <li>Visual</li> <li>Programming</li> <li>Software</li> <li>Distinction Pretech.</li> <li>Studies Grade 9 P.B.</li> <li>Pg.55-64</li> </ul>	<ul><li>Rubrics</li><li>Projects</li><li>Portfolios</li><li>Written Tests</li><li>Observation</li><li>Schedules</li><li>Checklists</li></ul>	
13	END OF TERM ONE ASSESSMENT/CLOSING								