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LESSON PLAN: Technology Grade_8_____				
Name of School:		Term: 1		Week: 3
Name of Teacher(s):				Date
Focus	Communication skills and Design			
CLASSROOM ACTIVITIES:				
Periods	1	2	3	4
Content, concepts and skills	•Revision: mechanical advantage. Well-designed machines give “mechanical advantage”. • All complex machinery consists of combinations of simple mechanisms. - the wedge: e.g. inclined plane or ramp, door wedge, knife blade, etc. - the wheel and axle: e.g. from bicycle to shopping trolley.. • mechanisms that change the direction of movement	Gears: (wheels with wedges for teeth) - Show how meshing of two spur gears causes counter-rotation. - Show how introducing an idler gear between two spur gears synchronizes rotation of the driver and driven gears. note: Since a small idler will rotate more times than the larger gears, it should be made of harder material. NB- other gear types will be for term 3	• Gear ratios: The formula used to calculate gear ratio	- The Cam - The Crank: an adaptation of a second-class lever.
Teacher’s Activities	- teacher explains mechanical advantage - teacher also explains that machines give mechanical advantage - teacher emphasizes to learners that machines are made up of a combination of	- teacher explains the following important terms • gears • meshing / interlocking • cogs • spur gear • rotation • idler gear	-Shows how different sized gears result in a change in the velocity ratio as well as an ‘opposite’ change in the force ratio – if force increases, speed decreases, and vice versa - teacher to demonstrate using diagrams and	- shows how a cam converts rotary motion into reciprocating motion. Compare an eccentric wheel and a snail cam. -Show how a crank converts rotary motion into reciprocating motion. -NB: Use Design pictures on



	mechanisms :- wedge, wheel, gear, cam, crank	• Driver gear • Driven gear	models.(teacher makes sure brings different sizes of gears to class)	page 87 DBE workbook as examples to emphasize on the operation of a Cam and crank -Photocopy formal activity on page 89 DBE (Design) in advance.
Learners' Activities	- write an enhancing activity on wedges(inclined planes)	- Write notes - study diagrams in the DBE workbook	-learners to calculate gear ratios	-Learners observe in class
Type of Assessment	INFORMAL	INFORMAL	INFORMAL	INFORMAL
Resources	DBE workbook pages 58-61	DBE work book pages 64-66	DBE workbook page 68-70	DBE workbook page pages 74-80
	Eduvideo Vol 1, DVD 3&4	Textbook		Textbook
	www.youtube.com	Chalkboard	Chalkboard	
IDENTIFIED LEARNERS' NEEDING SUPPORT:		Name of learner(s)		Name of learner(s)
the name(s) of learner(s) identified as having learning difficulties/not achieving or use the class list.		1.		5.
		2.		6.
		3.		7.
		4.		8.

How are you going to include and differentiate Support for learners?

Teacher Activities	Learner Activities:	Resources

How are you going to include and differentiate Expanded opportunities for learners?

Teacher Activities	Learner Activities:	Resources
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TEACHER REFLECTION:

Teachers Signature : _____ Date: _____

Pre -Moderated by line manager e.g. HOD/Deputy Principal (attach a moderation tool?): Signature: _____ Date: _____

Post moderation by HOD:

Formal Assessment Feedback								
Assessment Results Analysis	Level of achievement	1	2	3	4	5	6	7
	Indicate number of learners per level achieved							