Key Concepts	Forces	Electromagnets	Energy Changes	Energy	Waves
National					
Curriculum	* Forces				
Knowledge	measured in				
&	newtons,				
Jnderstandi	measurements				
ng	of stretch or				
_	compression as				
	force is changed				
	* Forces				
	associated with				
	deforming				
	o! "ects#				
	stretching and				
	s\$uashing %				
	springs# with				
	ru!!ing and				
	friction! etween				
	surfaces, with				
	pushing things				
	out of the way#				
	resistance to				
	motion of air and				
	water				
	* Force&				
	e' tension linear				
	relation# (oo)e*s				
	+aw as a special				
	case				
	*, oment as the				
	turning e-ect of				
	a force				

* Wor) done and energy changes on deformation		to energy	

! efore they start this topic to ensure they can apply their e' isting) nowledge to this new content and conte' t1 /upils should now have the mathematical s) ills needed to plot a graph and identify the proportional relationship ! etween force and e' tension1 Understanding relationships ! etween forces will prepare	is important to ! uild upon these fundamentals and provide pupils with the) nowledge and s) ills to investigate and depori! e pressure in Ouids1 /upils should have the appropriate mathematical s) ills to carry out calculations using given formula and record and o! serve 2ndings from	! uild upon their e' isting understanding in this unit and apply principles of magnetism and electricity to electromagnetis m1 /upils should have the appropriate scienti2c s) ills at this age to use plotting compasses correctly and use the e\$uipment needed to produce an electromagnet safely1 /upils) nowledge to the concepts of energy transfers and pathways1 / upils should have appropriate mathematical s) ills in year A to calculate wor) done and energy1	particles1 9t is also important that this unit is taught after particle theory is taught in year? and year A Chemistry1	vital àssģ2•
will prepare pupils for further investigation of motion, such as acceleration and circular motion in year B and K7C1	from investigations1	safely1 /upils should have the scienti2c s)ills to plan, o! serve and ma)e conclusions and predictions ! ased on outcomes1			