CHAPTER 9: Application of forces and transfer of energy types of forces 2 Non-contact forces forces experienced by bodes even if they are not in physical contact with 1. Contact forces—forces experienced by bodies when they are in physical each other force force General forces acting apposite Objects to Earth to the action to the direction of Motion 3. Friction-the contact force that opposes. Mends to oppose motion between surfaces in contact special cases: 1. wheels arotion of wheel adjection of friction to move to the right, the wheels has to notate in a clockwise direction to move to right, the foot has to push backwards to the ground friction apposes motion, therefore it acts to the right finding opposes motion, therefore it acts to the right Reducing negative effects of friction wheels bull bearings sphoroal ball bearings work like wheels. They roll around, instead of dragging the bax over the ground, and prevent moving surfaces in markins from rubbing against the circular shape of the wheels rotate and prevents each other directly direct contact with the ground With less friction, a h-bricant air cushion a larger of air between surfaces reduces friction, so a hovercraft can travel faster with hubricant added, engue surfaces in contract experience less findion when they more against each other. A rough surface generals more friction compared to the smooth sturface Enhancing positive effects of friction Treads—"channel water out from under tyres, which improves the tyres grip on the road sunface, and prevent vehicles from skidding Parachule—the longe air resistance created by the canopy of an open parachule slows down a descending parachulist, so that he may land sately (holk-) rock climber apply chalk powder to their polins to obsails sweet, and henc impose their grip Comparing weight and mass Mass definition. The measure of the growteniand force acting on an object amount of matter in an object changes ide will com thems: difficult values depending on gravitational field strength value. remains unchanged, independent of gravitational field strength

Annabet of the proper or white a man appeared in a man appeared in a man appeared from a distribute. Annabet of the proper or white a man appeared in a man appeared in a man appeared from a distribute. Annabet of the proper or white a man appeared in a man appeared in a man appeared from a distribute. Annabet of the proper or white a man appeared in a man appeared in a man appeared from a distribute. Annabet of the proper or the children and a man appeared in a man appeared from a distribute. Annabet of the proper or the children and a man appeared in a man appeared in a man appeared from a man appeared in appeared in a man appeared in appeared in a man appeared in appeared in a man appeared in appeared in a man appeared in a man appeared in appeared in a man appeared in a man appeared in a man appeared in appeared in appeared in appeared in	SZ unit:	New	iton (N	1						Kilonr	am (ko	a													
Support the service of the service o	in strangent t	ho								42		y													
formateriane field general field and a region in which a real organizer a general man face of otherwise general man field steepings, in the quantitational field steepings, in the quantitational field steepings, in the copic man in 1700 of long mountains and steepings in the copic man in 1700 of long mountains and place term in a mount ling would be a related to the copic of the cortic of the			g balanu	.				^		electo	nic M	au bo	alance	beam	balance										
formational field generational field generation of the control of	T 1		(K) (n/k ₄)	بالموموم والان				(kg)	(M)	(w/F	(چ	الم اداد											
granulational field of a project in which a mean organizer is granulational force of attention. granulational field officially on the chipical mones closer to centin granulational field officially on the chipical mones closer to centin on stigon. The project of granulation of the contin of the contino of th	Calcula IC	3	aft - louds	er At dan	IDTIONAL T	ACIO SHEIGH				Minas -	eac 1 diff.	- Armana	TANKET T	Heir Zu	cugu										
granulational field of a project in which a mean organizer is granulational force of attention. granulational field officially on the chipical mones closer to centin granulational field officially on the chipical mones closer to centin on stigon. The project of granulation of the contin of the contino of th																									
generations field play straight in the grantestinate force acting par unit these of attentions generations field glas straight at the object moves closer to rests generations field glas straight at the object moves closer to rests generations field glas straight at the object moves closer to rests generations field glas straight at the object moves closer to rests generations field attending of the object moves closer to rests generations field attending of the object moves closer to rests generations field attending of the object moves closer to rests generations field attending of the object moves closer to rests generations field attending to the object moves closer to rests generations field attending to the object moves closer to rests generations field attending to the object moves closer to rests generations field attending to the object moves closer to rests generations field attending to the object moves closer to rests generations field attending to the object moves closer to rests generations field attending to the object moves closer to rests generations field attending to the object moves closer to rests generations field attending to the object field attending to the object of the object	Comunication	al fais																							
greater than a field straight, is the greatest lead from allog get unit these agreements field gets. Manager as the object mounts closer to rath. On 1900an The object with a 1900a of 1800an The object with a 1900a of 1800an The object with a 1900a of 1800an The force of greatly. On the 1900an is less than on Earth, they appear and weak the control they as force of 100 M The force of greatly. On the 1900an is less than on Earth, they appear and weak the or then an Earth Howard, the object would have the same than on Earth May appear and weak the on Atom than an Earth Howard, the object would have the same than on Earth May appear and weak the on Atom than an Earth Howard, the object would have the same than on the object would have the same than on the object would have the same than on the object would have the same than object would be an object would have the same than object would have the same than object would have the same than object would have the same of the object o	Michiel (0114)	MI IVER																							
greater than a field straight, is the greatest lead from allog get unit these agreements field gets. Manager as the object mounts closer to rath. On 1900an The object with a 1900a of 1800an The object with a 1900a of 1800an The object with a 1900a of 1800an The force of greatly. On the 1900an is less than on Earth, they appear and weak the control they as force of 100 M The force of greatly. On the 1900an is less than on Earth, they appear and weak the or then an Earth Howard, the object would have the same than on Earth May appear and weak the on Atom than an Earth Howard, the object would have the same than on Earth May appear and weak the on Atom than an Earth Howard, the object would have the same than on the object would have the same than on the object would have the same than on the object would have the same than object would be an object would have the same than object would have the same than object would have the same than object would have the same of the object o	gravitations	h field m	a reg	ion in wh	hida or Mass	суренение о	a gravitation	al force of a	Hracion																
grantenium field gets the lager as the object minute closer to rath on played with a state of the certs and object with a most of like would be offered the world the coults of the certs by a force of 10N The Force of gravity on the Object interest the object would have the same that or they are the object would have the same that or they are on a object would have the same that or they are on a object would have the same that or they are on an object would have the same that or they are on an object would have the same that or they are of 15KM The Force of gravity on the object interest of the or minute of an object when they are on an object interest of the or the object of the or minute of an object change in present on an object, the object of the or minute of forces Changes in the state of first or motion on an object when the or may force or arising on an object, the object is called resultant force I the resultant force is only the force or wedge and it will result in an effect on the objects a resultant force is represented by a devolutable behavior along, when was a second object on object the objects are of 15KM The resultant force is represented by a devolutable behavior along, when was a second object on object the objects are resultant force in object for the objects of the object of the objects of the object of the obje																									
On 1900A The Street of State of Pett of Institut of the service acting on the digit is called force The recultant force is 9M, the fears are application of forces The recultant force is 9M, the fears are application of forces The recultant force is 9M, the fears are application of forces The recultant force is 9M, the fears are application of the digit is called recultant force in the recultant force in t	diam'r, avai	nco si	cigin, 9	is the d	rant felt vali	ur force ac	ing her n	Mr. hdaa																	
The force of greatly on the month is easily of the arth and a place with a place with a sound by a force of 10M. The force of greatly on the Moon is less than on Earth. May object with a sound began than an Earth thousand, the chipe's would have the same man object. There is a object consumer, changes in the state of took or minus of an object. There is a object consumer, changes in the state of took or minus of an object. There is a object on an object consumer, changes in the state of took or minus of an object. Changes in the state of rest or months on an object changes in presence on an object change in presence of months of the objects. - in the resultant force is 900, the force on unappeal and it will result in an effect on the objects. - a resultant force is 900, the force on unappeal and it will result in an effect on the objects. - a resultant force is possible the object desired changes on the object of an object desired changes of an object desired change	gravitation:	field ge	ts stree	ger as th	c adject	moves clus	er to ear	tin																	
The force of greatly on the month is easily of the arth and a place with a place with a sound by a force of 10M. The force of greatly on the Moon is less than on Earth. May object with a sound began than an Earth thousand, the chipe's would have the same man object. There is a object consumer, changes in the state of took or minus of an object. There is a object consumer, changes in the state of took or minus of an object. There is a object on an object consumer, changes in the state of took or minus of an object. Changes in the state of rest or months on an object changes in presence on an object change in presence of months of the objects. - in the resultant force is 900, the force on unappeal and it will result in an effect on the objects. - a resultant force is 900, the force on unappeal and it will result in an effect on the objects. - a resultant force is possible the object desired changes on the object of an object desired changes of an object desired change				00 60	etta					ON N	Mara														
The force of granty on the Moon is less than On Euro, May appear with weight the content the content of the con																									
be attended towards the centre of the centre	gravitational	field s	rengh, g	(ON/K	9					166 N	lkg														
be attended towards the centre of the centre						a Mak	of Ika	anna lel		-7 EA A	biect	ath a a	nose of	ka u	nuld bo										
by a face of 10N The force of grandy on the Moon is less than on Earn May algor will acide have an Moon than an Earth However, the object would have the same mass on and hope appears when two or more object intends of an object intends of an object intends of an object intends of an object intends of the state of rest or motion of an object intends of the state of rest or motion on an object intends of the state of rest or motion on an object intends of the object intends of the or more force or more forces are arrang on an object intends of the object intends of the or more force in the state of the object intends of the object				<u></u>	V		2	30																	
The force of granty on the Moon is less than on Earth Any abject will acquire be on Allow than an Earth However, the object would have the same mass on any object an angle of the same in the same of an object concern. Changes he there is an another change in still shape of an object changes in still shape of an object changes in pressure an an object changes in pressure an an object changes in pressure an an object changes in the style of rest or motion on an object changes in the style of rest or motion on an object changes in the style of rest or motion on an object when two or more forces are aroung an an object when two or more forces are aroung an an object when two or more forces are aroung an an object when two or more forces are aroung an an object to a the object is called resultant force. If the resultant force is all the forces are unaqual and it will result in an effect on the objects. If the resultant force is reproceeded by a devolutionable of the object of the objects of the object of the obj				be attract	ed towar	ds the cent	ne of the	certh		attract	ed tow	ards 4h	e centre	e of the	Earth b	3 4									
The force of granty on the Moon is less than on Earth Any abject will acquire be on Allow than an Earth However, the object would have the same mass on any object an angle of the same in the same of an object concern. Changes he there is an another change in still shape of an object changes in still shape of an object changes in pressure an an object changes in pressure an an object changes in pressure an an object changes in the style of rest or motion on an object changes in the style of rest or motion on an object changes in the style of rest or motion on an object when two or more forces are aroung an an object when two or more forces are aroung an an object when two or more forces are aroung an an object when two or more forces are aroung an an object to a the object is called resultant force. If the resultant force is all the forces are unaqual and it will result in an effect on the objects. If the resultant force is reproceeded by a devolutionable of the object of the objects of the object of the obj				bu a for	re of in	N				face	of 1.6	6N													
When Pappens when two or more object, interesting effect of the arminal oil an object angel on an object concern; changes in the state of the arminal oil an object changes in size shape of an object changes in presume an an object transfer of steggy due to application of forces transfer of steggy due to application of forces Changes in the state of rest or nation on an object when have or more forces are axing on an object, the object force acting on the object is called resultant force if the resultant force is OH, the forces are appeal and it will result in an effect on the objects if the resultant force is one of the constant of the objects of the				•																					
When Pappens when two or more object, interesting effect of the arminal oil an object angel on an object concern; changes in the state of the arminal oil an object changes in size shape of an object changes in presume an an object transfer of steggy due to application of forces transfer of steggy due to application of forces Changes in the state of rest or nation on an object when have or more forces are axing on an object, the object force acting on the object is called resultant force if the resultant force is OH, the forces are appeal and it will result in an effect on the objects if the resultant force is one of the constant of the objects of the	The for	rce of	deni	9 01	the 1	noon is	less than	on Earth.	Any obj	lim to	ucigh 1	66 ON	Moon	then c	n Eart	h.Howe.	er, the	object	t woul	d ha	e the	SAIN	. Mass	on M	200
Forces application and activation of the state of rest or makes of an object amongs due to the turning effect of a force on an object changes in since shape of an object changes in the state of rest or motion on an object when two or more forces are arising an an object, the overall force acting on the object is called resultant force — if the resultant force is only the forces are anappal and it will result in an effect on the objects — a resultant force is represented by a double-headed arising When there is a resultant force, creany is transferred between about, whole may cause a statuturing apper to start making there are appealed to change, the direction is which on object from the objects change the direction is which on object from the objects change the direction is which on object from the object arising object to stop moving change the direction is which on object from the obje																							•	nd to	lrth
Forces application and activation of the state of rest or makes of an object amongs due to the turning effect of a force on an object changes in since shape of an object changes in the state of rest or motion on an object when two or more forces are arising an an object, the overall force acting on the object is called resultant force — if the resultant force is only the forces are anappal and it will result in an effect on the objects — a resultant force is represented by a double-headed arising When there is a resultant force, creany is transferred between about, whole may cause a statuturing apper to start making there are appealed to change, the direction is which on object from the objects change the direction is which on object from the objects change the direction is which on object from the object arising object to stop moving change the direction is which on object from the obje																									
Changes in the state of nest or motion on an object thought in presume an an object theoret of energy due to application of forces theoret or nest or motion on an object when two or more forces are away on an object, the averall four acting on the object is called resultant force if the resultant force is 0N, the forces are equal if the resultant force is possibly the forces are equal if the resultant force is proceeded by a downlot-bracked arraw by When there is a resultant force is represented between above, which may course a statument appear to start resultant force is a resultant force is represented between above, which may course a statument appear to start results change the speed of an object from change the direction in which an object from change the direction in which an object from cause a many adject to stop money	Mhet Joh	rpets wi	nen two	or mor	is oplan	interest?												-		-					
Changes in the state of nest or motion on an object thought in presume an an object theoret of energy due to application of forces theoret or nest or motion on an object when two or more forces are away on an object, the averall four acting on the object is called resultant force if the resultant force is 0N, the forces are equal if the resultant force is possibly the forces are equal if the resultant force is proceeded by a downlot-bracked arraw by When there is a resultant force is represented between above, which may course a statument appear to start resultant force is a resultant force is represented between above, which may course a statument appear to start results change the speed of an object from change the direction in which an object from change the direction in which an object from cause a many adject to stop money	Forces and	ico 64 6	n abico	CAN COUSE	changes	in the state	e of rest o	to motion of	an obic	c)															
Changes in the state of rest or motion on an object thought in pressure on an object the state of rest or motion on an object when the or more forces are away on an object, the overall force acting on the object is called resultant force - if the resultant force is 011, the forces are aqual - if the resultant force is 7011, the forces are aqual - if the resultant force is represented by a double-breaked arrow When there is a resultant force, croquy is transferred between object, which may course a statument appear to start moving though the direction in which an object than cause a moving object to step moving.	T						a figur	# Mak a binn																	
Changes in the state of rest or motion on an object when two or more force are aring on an object, the overall force acting on the object is called resultant force - if the resultant force is all the force are unaqual and it will result in an effect on the objects - a resultant force is represented by a downlow-headed aring the state of an object (more force) When there is a resultant force, every in transferral between abject, which may cause a statuting abject to start morning Changes in the state force is represented by a downlow-headed aring the state of an object (more force) Changes the speed of an object (more force) Change the direction in which an object force					danges o	he to the	turning eff	ect of a fem	e on an	object															
Changes in the state of rest or motion on an object when two or more force are aring on an object, the overall force acting on the object is called resultant force - if the resultant force is all the force are unaqual and it will result in an effect on the objects - a resultant force is represented by a downlow-headed aring the state of an object (more force) When there is a resultant force, every in transferral between abject, which may cause a statuting abject to start morning Changes in the state force is represented by a downlow-headed aring the state of an object (more force) Changes the speed of an object (more force) Change the direction in which an object force					chance	n size/si	hape of at	object																	
Changes in the state of rest or motion on an object when two or more forces are awing on an object, the overall force acting on the object is called resultant force - if the resultant force is ON, the forces are aqual - if the resultant force is represented by a double-headed arrow When there is a resultant force, croqy is transferred between object, which may: cause a statusary object to start moving Abong the speed of an object forme force / shower) - change the direction is which an object from the object to start moving - change the direction is which an object from the object to start moving - change the direction is which an object from - change the direction is which an object from - change the direction is which an object from					"																				
Changes in the state of rest or mation on an object when two or more forces are acting on an object, the overall force acting on the object is called resultant force - if the resultant force is on, the forces are appeal and it will result in an effect on the objects - o resultant force is represented by a daude-heated arrow When there is a resultant force, energy is transferred between object, which may cause a statument object to start moving change the direction in which an object may change the direction in which an object may cause a many object to stop moving . cause a many object to stop moving					change	in pressur	e on an a	plea												-					
Changes in the state of rest or mation on an object when two or more forces are acting on an object, the overall force acting on the object is called resultant force - if the resultant force is on, the forces are appeal and it will result in an effect on the objects - o resultant force is represented by a daude-heated arrow When there is a resultant force, energy is transferred between object, which may cause a statument object to start moving change the direction in which an object may change the direction in which an object may cause a many object to stop moving . cause a many object to stop moving					- transf	er of energ	y due to	application	of foru	5															
when two or more forces are acting on an object, the overall force acting on the object is called resultant force - if the resultant force is 700, the forces are acqual - if the resultant force is 700, the forces are unaqual and if will result in an effect on the objects - a resultant force is represented by a double-headed arrow When there is a resultant force, energy is transferred between abject, which may cause a stationary object to start moving change the direction in which an object moving cause a moving object to stop moving						9	,	•																	
when two or more forces are acting on an object, the overall force acting on the object is called resultant force - if the resultant force is 700, the forces are acqual - if the resultant force is 700, the forces are unaqual and if will result in an effect on the objects - a resultant force is represented by a double-headed arrow When there is a resultant force, energy is transferred between abject, which may cause a stationary object to start moving change the direction in which an object moving cause a moving object to stop moving																									
when two or more forces are acting on an object, the overall force acting on the object is called resultant force - if the resultant force is 700, the forces are acqual - if the resultant force is 700, the forces are unaqual and if will result in an effect on the objects - a resultant force is represented by a double-headed arrow When there is a resultant force, energy is transferred between abject, which may cause a stationary object to start moving change the direction in which an object moving cause a moving object to stop moving	Changes	in 1	the s	tate of	rest o	r motion	on an	object																	
The resultant foice is OV, the forces are equal - if the resultant force is > DV, the forces are unaqual and it will result in an effect on the objects - a resultant force is represented by a devolute-heated arrow When there is a resultant force, energy is thankeled between abject, which may: cause a stationary object to start manage change the direction in which an object flow - cause a manage object to stop moving								· •		6344		. 0	1 agr. 1	م دملا											
- if the resultant force is ON, the forces are equal - if the resultant force is >0N, the forces are equal - if the resultant force is persented by a double-headed arrow >>> When there is a resultant force, energy is transferred between object, which may: cause a stationary object to start moving change the speed of an object force) - change the direction in which an object force	mber the	or Ma	re toro	es are a	icting on	an object	, the over	rail torce ac	ang on	THE.	oper i	r Cours	or LCON	THANT YO	ræ										
- if the resultant force is 3011, the forces are capual - if the resultant force is 3011, the forces are unequal and it will result in an effect on the objects - a resultant force is represented by a double-headed arrow When there is a resultant force, energy is thankeled between abject, which may: cause a stationary object to start moving change the speed of an object (moving faster /slower) change the direction in which an object that	3/4	→ SN		3N	SN	> 4	3N	707																	
- if the resultant force is 500, the forces are capual - if the resultant force is seprescribed by a double-heated arrow When there is a resultant force, energy is transferred between abject, which may: cause a stationary object to start moving Change the speed of an object (move forsier/slower) - change the direction in which an object arous - cause a moving object to stop moving	resultar S.H. to 1	t force . The right			J (chalten)	periding	Ţ	regularit Fone:																	
- if the resultant force is represented by a double-heated and When there is a resultant force, energy is transferred between abject, which may: cause a statement object to start moving Change the direction in which an object follows: (ause a moving object to stop moving																									
- if the resultant force is represented by a double-heated and When there is a resultant force, energy is transferred between abject, which may: cause a statement object to start moving Change the direction in which an object follows: (ause a moving object to stop moving	- if the	resulta	nt foice	IS ON, t	the forces	are equal																			
- a resultant force is represented by a double-headed arrow						•	سائليمان	ill count :-	as off-	74 m	الم معالم	ech.													
When there is a resultant force, energy is transferred between abject, which may: cause a stationary abject to start moving change the speed of an object (move forster follower) change the direction in which an object true cause a moving abject to stop moving	- 17 THE	(CANTON	m wrie	·> 70N,	· me #QLUES	ALC MINCHIN	pr 9714 17 (A	THE PERSON IN	AN EIR	ON .	יעה סט	reis													
change the speed of an object (move faster /slower) change the direction in which an object mays cause a moving object to stop moving	- a resul	tant for	rce is no	presented	by a dov	ible-headed	ation →		1																
change the speed of an object (move faster /slower) change the direction in which an object mays cause a moving object to stop moving	When 420	ne is r	necult	ant farm	S. 610m. s	is Argudores	helim	Aires pulsare.	Melu :	160 0 4	otine es :		dad	nfm:4e											
change the direction in which an abject that cause a mounty object to stop moving	projit 1880		- r word t		,21	in the plant	, or make (arco, assures			-110-4014	J	- Stati	. roung											
cause a money object to stop moving									che	ange the	speed o	of an o	bject (a	have fo	nster/slo	met)									
cause a money object to stop moving									. ela	cando .	he clim	ection :	انطن	A 470 M	biect #m	6									
															V										
									-(4	ruse a 1	naving of	bject to	stop me	wing											
Changes due to the turning effect of a force on an object	Changes d	ue to	the tu	ining effe	ch of a	force on	an objec	+																	
a force applied an an object can cause a turning effect about a fixed point colled the pirot. This turning effect is called the moment of a force s.z. unit is Newton-metre (Nm).	a force am	plieda	ocanirai	np3: baje	couse a t	urnipa effe	though the	fixed number	called	the Divi	st. This	fumia	effed i	s calle	ed the	enome n	of a	force	\$ 1. un	t is	Newto	n-met	re (N	n).	
		1				, ,				1		3													

Exampl	e of	Moto	onts in	our	daily (life			1 1										-									
a larger	stee	ering u	weey c	nobles	the di	nive: to	turn 1	the	1	in 010	ler tu	prod	luce H	ne sam	e tun	ung eff	lect, mo	ore force		the se	esaw	is pivo	ted in	the CCI	ine ja	Older to	balance	đ
steering	wincel	mare	easily	, Hais	isaby	lange b	uses d	nd homy	i	weds	to b	e appl	lied to	mwc +	he gar	over	a long	distan		complet	ely,+ne	sum of	Clackwiss	- noment	noust be	: Oqual	to the	SUPA
webicks (vollve	ally h	ns large	er sheel	ring wh	rel.			1 1 1	so the	nt time	canoe	can (nove d	lung	r dista	arec			of ON	ri - clod	wiee n	nament					
(alculo	rtino	mo	Ments																									L
moment					dicular	distance	tom.	the piv	ot to	the li	ne of	acho/	of	the f	urce													H
	(Nex) M		(N)		ر منائم			maki . el	lackioa																			
moment of											to th	e OMi-	Clockwis	e manc	nt													
			ant - ciweken druhten dieset protei	Ť,	F 1																							
									(lo	clourse Momes the proof	, ~	F																
Unanges	in sa	c/s/pa	ne of	an o	bjet																							
Example	es: (t	ineadi	ng plas	ticine											Mould	ing clay)											
		when	we ap	iply a	force	to kne	pl bay	asticine	,the sh	vape of	the	p last icin	c change	<u> </u>	Wyc n	ue mo	ould a	hump	of ue	t clay, 1	he spa	and d	tale o	d the	clay (harges		
Change	es i	v bi	essuic	of	an o	bject																						
Pressure		in eff	ect of	force	acting	g on an	objed	and is	defined	a the a	trount of	force	acting po	r wat a	/Cal													
Example																			1									
WR use			i					L	÷					f foot by th							_					NE VER		
A large the pin	•									grip or				25 "	~ 4~~	11 44 C							to cust th			the Cu sily.		7 3
																											<u> </u>	
Stiletto	heck	s ofte	kove	unsighi	Hy Mort	ls in corp	pets.This	s is	-	When	nc þai	nomer a	معا, بعد	May	audek	ally hon	an isan	ur finge		When t	a cer	yre ro	lls over	the sh	ub ban	ed end c	fυρ	el,
because "		- 1	the go	barer 6	sens a	large pa	tusurc a	n a	!					ct On a					1				Ľ			e on the		the .
senall erts	101 9	round.							1	a bruis	-	re on (OUT SINGE	r burts	the blo	od vess	is and p	od na:	-	nail les	a ve	Steal 6	Mar. This	may p	aacture ·	the the		
																												L
(alculati				7																								
Pressure	= ale	d (m²	P	A																								
Pressun	e in li	quids																										
The gre			oth, the	higher-	tinc pres	ssure.Th	is is b	ecause	at a c	greater	depin, t	here is	a gre	akus oan	oun) d	water	apove	a sp	ecific p	oin as	comp	et bar	a pint	404 is	at a	shallow	er deph	
The gra																												
Ma	de with	GO	odno	otes																								

Exan	nples																											
	1														e													
Build	ling w	mer su	PPM												Submo	rine												
- wa	nter is	deli	rered t	o and	store	t ni b	anks a	t the t	op of	mast	high nis	e build	lings		- S J	omerius)	dive ve	u deep	underwe	her when	e there	is high	DLES EOLS					
																		1. 1					ĺ					
- this	Cave	wate	(iv bil	oes bei	ow the	tank	to be	at a	higher f	nessure	and en	eniez H	Valt worke		- a s	trolly s	Leloff dr	we pog	y is no	oded to	with	stand.	the hic	w buer	sure			
flaus	to the	unik	down												- 41161	merines t	ove a (depth lim	to 6%	ne that	it Kesps	tv a s	afe dep	in when	: the p	ressure is	Not hig	h
																							`		•			
															crough	-to di	mage	the s	ubmame	or cal	ise on	implosia	^					
HMM	ospine	ic pre	ssure																									
- the	earti	is s	uround	led by	a lay	er of	air (n	nolecule	() Calle	d the	atmosphi	ere																
				,																								
OI1	mougy	we (,qivjor	356 0	100 18	e ou n	Markfrees	. mo1	eque up	space	and Indi	ue weg																
- 4m	rs, the	at mos	phere o	erents or	pressur	on .	the Ga	nth's su	arface o	end on	WS																	
•- •			الدمده			43				- Mad		bar																
	press	ure e	Enco	y tre	CONF MY	THE E	authz e	Mirashi	ce is i	Spires (etmosp)	ner pr	essure															
-atp	nospie	ur buca	UR 15	approxi	mately	100 000	lu u	t scu	kvel, and	decra	rse with	increasi	ng height	from s	ea level													
_	١.																											
にメロ	wbie	. 1 7	drinkif	ly stro	aU.										erai	npie	1-5	uctio	cuf									
	el.	more her	\Box												U.	all -	\neg											
	1	ī	/ /_	pressu less th															saction (ир								
			/	atmos	pheric													_		nàme.	salaceir, d	PSSARE.						
				biezzi											(lome	raccuth and rain une)		17	_	(gle	ner press	ute)						
			– `	liquid	being										press	ure)		И,										
				liquid puches the s	dup "																							
																	'											
-11.50	· · · · ·	Star	the	unde a	s closs	n lie	ar. I	Pdurine	the.	nes cues	in the	e e e e e e e e e e e e e e e e e e e			- ,,,,	en u	e De	9 55 a 3	Maction	01A A	anist a	Slai .	nelso i	ni is ne	shed a	ut fram	under	
				1 -					1							O11 80	, F.			cod) o	gans o	3141	, m (100.)			, par	A (C.)	
-this	دهديد	s a p	ressure	diffen	cive to	be s	et up	betwe	en the	straw	and th	e oim	aspinare		the	cup												
- a s t	the other	ospher	pres	ssule is	areal	er.it	OUSINEA	an the	Suffic	ke of	the 1	lietuid , f	orci n q		- this	reduc	es the	City E	messure	beku	een the	CMP	and 1	he wa	1			
		1											"					'				•						
the 1	iquid	to ris	e up	the s	traw i	ilo oui	Won	th							- the	atmos	pneric	presi	ure a	OUND	the si	action (up is	Right	than	inside	the cu	P
															and h	cne h	olds it	in pl	ne.									
																		'										
Trans	ster (of e	vergy	due	to a	p pl icat	tion of	forces																				
- enc.	nau ic	trans	ester)	wihe∧ a	force	applică	ONICE A	an oloid	Ct 4n B	Nove in	the sal	me alin	ection	as the	Contro													
	-,														1011													
- whe	ene	ey is	Hans	ferrod,	work i	is done	e throu	dy abb	licertion	of th	e force																	
-SI u	nit of	encro	y and	work	done	: Joul	le (2)																					
		l '	Ī																									
-coro	ATTONS	tor w	ar 0/0	ne:1)a	1 tota	is app	yliked on	the o	oper																			
				2)	opleg	Moves																						
					-		in the	معفم	digo.		force ap	لمام																
					1						'	Τ																
-wark	done	by a	constant	force	on a	obje	ct is t	the pr	aduct o	of the	force	ond s	the di	stance and	wed by	the c	plics in	the di	rection O	the t	force							
- fam	eula fo	r wark.	done	. W0	EFXS)																						
	Made w	ith Go	odn	otes																								

Forms of energy kinetic energy (kE) - energy of a body due to its motion chemical potential energy (CPE) patential energy - stoted energy in a system due to the state, slupe or position of the system. -gravitational potential energy (GPE) chemical potential energy - the energy stored in substance due to the position of elastic potential energy (EPE) of the atoms or electrons in the substance Sources include food, fossil fuels and batteres gravitational potential energy-the energy stored in a body due to its height from the diaming elastic potential energy-time energy stored in a body due to its elastic deformation eg. a spring or rubber band possesses elastic potential energy when it is compressed or stretched electrical energy (EE)—the energy of an electric change due to 1ts Motion and position light energy (LE)—light is an electro-magnetic wave that is visible to the eye thermal energy (TE) - the energy stored in a body due to its temperature nuclear energy (N6)—the energy released cluring a nuclear reaction. There are two types of nuclear energy-nuclear fusion and nucleur fission Hinaple of conservation of energy -states that energy cannot be created or destroyed, but can be converted from one form to another. The total energy in an isolated system is constant — the total energy in the system remains the same; energy is only converted from one form to another or transferred from one body to another Examples of energy conversion a) sitting on a swing (or swinging a pendulum) 1. at it's highest point, a, the swing has goe only 2. at b, some of the ape of the swing at a is converted to ke s. at its lowest point, c, all the gipe of the swing at a is now converted to be 4. at d, some of the ke of the suring at c is converted back to appe s. he of the stung mouse the stuing to e. Here, the swing has goe only potential energy to potential energy potential energy *when there is no air resistance, all goe will connect to ke and back to goe : pendulum goes on forcer with air resistance, energy is lost to surroundings and pendulum will eventually stop b) Hammening a nail - a hammer possesses goe when it is in a raised position -as the hammer falls appeals converted to ke

- the	force	is used	to a	lo war	k by	driving	the M	Vail int	o woo	d. In	the p	rocess,	themna	and	sound	enegy	are o	also 1	Produce	d.								
. 14.	m:0d	-e -	. · I . E.	ala																								
	ming																											
	sil fuel																											H
	he cha						to the	erma) o	and lig	hit ene	95—																	
- the	therma	l encag	yisi	ased to	cook	food																						
Ηοω	is wo	rk don	e rela	ited t	o kine	tic en	းဗူဗု																					
-a s	tationa	y obje	eob f	. Vof	have ki	netic e	nergy, a	ahile a	MoviN	g objec	h does																	
-a fo	rce Me	ds to	be 0	upphod .	-to m	ake a	statio	onary o	object 1	move, a	nd the	. force	does	work o	n the	object	causi	ng it	to ma	ve								
	object																											
	ic ener												Λq															
	nic ener			- 1-	m	رق							,															
		30					iii (S)																					
				4-4				10.4																				T
	is wo									•																		
	object h														ion abo	ve the	dun	d										
- gpe	can t	e canve	nted to	ke .	when t	ne obj	ect is 1	rekusal	and a	lloved .	to fall	to 1	he grou	wd														
-gpe	of an	object	depen	ds on	its Mas	s, the	height	of th	e 06j	ect ab	oove fl	ne gr	ound a	nd the	gravit	ationa	1 field	streng	th.We	conside	- the	work d	one in	liffing	an o	deq o	f mass	_را
m, ve	rtically	to a	height	hjabo	ve th	s grow	d																					H
gpe o	er an	object:	gpe=	mgh	/(m)	2.00	e: an	avitetio	nd fiel	d strong	th on E	iarth is	taken	as IDM	le ³													
				(m/s² o	· N/kg)																						
What	ate -	the so	ounes	of e	nergy	that (ue use	:																				
	eVena																											
						escana .	-	Lude	and		auk a	nod.																
	renewa										Out 0	un Oré	3															
	of the																											T
- foss	il fuels	such	as u	ude oi	, coal	and no	rlund)	gots a	ne nan	- reneu	naldle so	urces o	f energ	y.Fossi	l fuels	are f	i leanne	by the	remair	s of d	eard P	launs an	id anima	el, which	takes	million years	ns of to for	M
renew	able so	urce o	f energ	ij																								H
-reneu	sable ·	sources	of en	agy a	e sow	res of	chag	y that	can b	e reu	sed or	reneu	indi	efiathely														
- unlia	ited su	pplies o	or Ven	n dwn	N of	organi	ums oc	llow u	s to a	ese the	se sour	s of	energy	contin	wously													
-exah	ples in	clude b	iofuels,	geothe	mal e	egy,s	olar e	energy,	wind .	energy	and h	ydroek	etric en	engy														
Fossi	l fuels	- non-	reneu	ounte																								
	al is c				d mot	orcucle	s. while	e diese	l is a	fuel f	for bus	es, tan	s and	larnes														
	sene ai																											
-11105	powe	ा उपगुल	r day	AGIC SCI	ocujon e	anengy A	y bui	und co	ou or	nature	ı, gas																	

energy	1 cour												burrs,u	anda is	conve	ied to	thermal	energy	as it	bums,	which	is conv	erhed to	Kretic	enengy (Apple to	to di	ne.
impad	: produ			urbine (the su	ı in tl	ne ead	h's at	mospher	e.This	will re	sult in	global	wam	ning. 🗡					
solar	enemu	ı – rene	mappe.																									
- eve					tly con	vented ;	nto el	ectrical	energy	by ph	dovoltaje	or s	olar ce	lls														
- the															o sunt	turbir	e to	genera	te ele	ctrica\	energ							
energy																												
impad:																				ماده و								
	- Shett	TILDIDI	are no	eds to	be fal	iven to	realuo	e the	or Monv	nr of †	XIC (Let	ere de	V REIGHECO.	david	+he	produc	V0/1	ing dis	posal (04 ROIG	- pane	D .V.						
	to de		ods	otoo																								
N	lade wit	n GO	oun	otes																								