chapter 2 practice

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) Inertia is defined as a		1)
A) force.	B) property of matter.	
C) change in motion.	D) none of the above	
0)76		۵)
2) If no external forces act on a moving object, it will		2)
A) continue moving at the same speed.B) move slower and slower until it finally stops.		
C) come to an abrupt halt.		
D) none of the above		
,		
3) A hockey puck sliding across the ice finally comes to	o rest because	3)
A) it seeks its proper and natural state.		
B) of friction.		
C) that's just the way it is.		
		4)
4) A hockey puck is set in motion across a frozen pond neglected, the force required to keep the puck slidin		4)
A) equal to its weight.	B) equal to its weight divided by its mass.	
C) equal to its mass times its weight.	D) none of the above	
, 1		
5) When no forces act on moving objects their paths ar	e normally	5)
A) straight lines.	B) circles.	
C) ellipses.	D) all of the above	
6) Whirl a rock at the end of a string and it follows a ci	rcular path. If the string breaks, the tendency	6)
of the rock is to A) follow a circular path.	B) slow down.	
C) follow a straight-line path.	D) stop.	
C) tollow a straight-line path.	<i>D)</i> stop.	
7) Which concept is being illustrated when a tablecloth	n is quickly vanked beneath dishes resting on	7)
a table?	4	′
A) equilibrium B) friction	C) support force D) inertia	
8) A package falls off a truck that is moving at 30 m/s.		8)
speed of the package just before it hits the ground is		
A) zero.	B) less than 30 m/s but more than zero.	
C) about 30 m/s.	D) more than 30 m/s.	
9) When a rocket ship gaining speed in outer space rui	as out of fuel it	9)
A) gains speed for a short time, then slows down		<i></i>
B) gains speed for a short time, slows down, and		
C) no longer gains speed.	•	

10) A moving van with a	a stone lightly glued to the	e midpoint of its ceiling :	smoothly moves at	10)
	nen the glue gives way, th			
A) ahead of the m	nidpoint of the ceiling.			
	the midpoint of the ceilin	g.		
	dpoint of the ceiling.			
D) none of the ab				
,				
11) While you are standi	ng in the aisle of a bus, th	e driver suddenly make	s a left turn. You lurch to	11)
the right due to	ing in the thore of a bas, th	e arriver suddering make	ou lest turn. Tou furest to	
A) an unbalanced	force			
	to keep moving forward.			
C) an equilibrium				
C) an equilibrium	i Chanenge.			
12) Nollio pulle with a fo	orce of 50 N on a horizonta	al rope tied to a tree at re	set. The net force on the	12)
rope is	ice of 50 in off a fiorizona	ar rope tied to a tree at re	est. The fiet force off the	12)
A) 50 N and rope	tonsion is 0 N	B) 50 N and rone	e tension is also 50 N.	
C) zero and rope		_	e tension is also zero.	
C) Zero and rope	terision is 50 iv.	D) zero and rope	e terision is also zero.	
12) When were quickly in	rk a cart forward that has	a hall masting in the mid	dla tha	13)
A) front of the car		a van resung in the init	die, tile	13)
B) back of the car				
		iddle as the sant marres f	ownrand	
	e ball rides along in the mi		orwaru.	
D) All of the abov	ve depending on how quic	ckty the cart is pulled.		
14) A C	er 1 - 21 1 d			1.4)
_	antity because it has both		.,	14)
A) magnitude and		B) mass and velo	-	
C) action and read	ction counterparts.	D) speed and dir	rection.	
1F) A 1 1 1 1 1 1 1	1.0 11.4ENT 11	· lo ·d ENLod		15)
_	e left with 15 N and to the	right with 5 N at the sar	me time experiences a net	15)
force of	D) 10 NI	C) 15 N	D) 20 M	
A) 5 N.	B) 10 N.	C) 15 N.	D) 20 N.	
	ed northward by a 10-N fo		5-N force pulls it	16)
	ltant force has a magnitud			
A) 0 N.	B) 15 N.	C) 25 N.	D) 150 N.	
-	forces act on a box of can	dy, the net force on the b	oox is	17)
A) zero.				
B) about 14 N.				
C) 20 N.				
D) Any of the abo	ove depending on the dire	ctions of forces.		
18) When Nellie Newtor	n hangs by the ends of a ro	ope draped over a large	pulley, the tension in each	18)
supporting vertical s	trand is			
A) half her weigh	t.	B) equal to her v	veight.	
C) twice her weig	ht.	D) none of the al		

19) If Nellie hang	s from a horizontal bar t	that is supported by tour vertical ropes,	, the tension in the	19)
ropes				
A) are eac	h half her weight.	B) are each equal to he	er weight.	
C) add to	equal her weight.	D) none of the above		
20) Suspend you	r body from a pair of ye	rtical ropes and the tension in each rope	will be	20)
	<mark>ur weight.</mark>	B) equal to your weigh		
	than your weight.	D) none of the above		
21) Suspend you	r hody from a pair of ror	pes slightly angled from the vertical and	I the tension in each	21)
rope will be	t body from a pair of for	cs slightly alighed from the vertical and	t the tension in each	
-	our weight.	B) half your weight.		
	than half your weight.	D) none of these		
	Newton hangs at rest in he rope when	the middle of a clothesline, tensions wi	ll be the same in	22)
	gths of each rope are the	same		
	gles for both sides of the			
	n equilibrium.	Tope are equal.		
	_			
	on any object in equilibr			23)
A) zero.		B) equal to its weight.		
C) less tha	an its weight.	D) non-zero when mot	tion is involved.	
24) Burl and Pau	l paint signs together on	a scaffold. Compared to their weights	plus the weight of	24)
	the sum of tensions in the	1		
A) less.	B) the sa	me. C) greater.	D) zero.	
25) Burl and Pau	l have a total weight of 1	.300 N. The tensions in the supporting 1	ropes that support	25)
	_	ght of the scaffold itself must be	op es unit support	
A) 300 N.	B) 400 N		D) 600 N.	
26) The not force	acting on an incost fallir	ag downward at constant valogity is		26)
A) zero.	acting on an insect faili	ng downward at constant velocity is B) the weight of the in	soct	20)
	d air resistance.	D) none of the above	sect.	
C) upwan	an resistance.	D) notic of the above		
27) The support	force on a 10-N book at 1	rest on a table is		27)
A) slightly	less than 10 N.	B) 10 N.		
C) slightly	greater than 10 N.	D) dependent on the p	osition of the book.	
28) Iason weighs	150 N and sits on his big	g brother's shoulders. Big brother weigh	ns 400 N. The	28)
0	supplied by the floor m			-,
A) 150 N.		B) 400 N.		
C) 550 N.		D) more than 550 N.		
29) The support	force on a 30-kg dog slee	eping on the floor is		29)
A) less tha		B) about 300 N.		,
C) more th		D) nonexistent while a	sleen	

30) The force that causes Earth to orbit	the Sun is due to gravity, wh	ale the force needed to keep	30)
Earth moving as it circles the Sun is	s		
A) inertia.	B) due to	gravity.	
C) due to both inertia and gravi	D) no force	e at all.	
31) If you toss a coin straight upward v	while in a train moving at cor	nstant velocity, the coin will land	31)
A) as if you were at rest.	B) in front of you.	C) in back of you.	
32) If you toss a coin straight upward i will land	in train that gains speed while	e the coin is in the air, the coin	32)
A) as if you were at rest.	B) in front of you.	C) in back of you.	
33) Earth continually moves about 30 l	U 1	-	33)
also is moving at 30 km/s. When y	, 1	oesn't slam into you because	
A) the speeds of you and Earth	cancel out.		
B) you're moving horizontally j	ust as fast as the wall.		
C) your upward motion is smal	l compared with Earth's spee	ed.	
D) motion of the Sun counterac	t		
A) the speeds of you and Earth B) you're moving horizontally j C) your upward motion is smal	cancel out. tust as fast as the wall. Il compared with Earth's spee	,	

Answer Key Testname: CHAPTER 2 PRACTCE

- 1) B
- 2) A
- 3) B
- 4) D
- 5) A
- 6) C
- 7) D
- 8) C
- 9) C 10) B
- 11) B
- 12) C
- 13) B
- 14) A
- 15) B
- 16) B
- 17) D
- 18) A
- 19) C
- 20) A
- 21) C
- 22) B
- 23) A
- 24) B
- 25) B
- 26) A
- 27) B
- 28) C
- 29) B
- 30) D
- 31) A
- 32) C 33) B