Study Questions for Force & Motion Test	Name	
Maria pushes a ball, and the ball rolls acro	ss the table. She wants to make the ball roll faster.	
Maria needs to push the ball		
O A. with more strength.		
OB. with less strength.		
Oc. on the other side of the table.		
O. on a different table.		
2. Jim and Jed are playing with a go-cart the	ey built out of wooden crates.	
Jed is riding across a flat surface, and Jim is b	pehind the cart.	
What is Jim doing to move the cart?		
O A. pushing the cart	O C. pulling the cart	
O B. nothing	O D. looking at the cart	
3. An object that is pulled with the least amo	unt of force will	
O A. move the furthest.	O C. not move at all.	
O B. move the slowest.	O D. move the fastest.	
4. A ball is thrown in the air. The ball goes up, the ball fall down?	then changes direction and falls down. Why does	
• A. Gravity pulls it down.	O C. Gravity makes the ball lighter.	
OB. Gravity pushes the Earth up.	O D. Gravity stops working.	
5. Which of the following can best represent	a change in position ?	
O A. Alyssa has a 42 inch TV.	O C. Kevin walks 7 meters.	
OB. Andrew is 4 feet tall.	O D. Katie's thumb is 3 centimeters long.	

6. Henry wanted to know how fast his pet tortoise could walk.

First, he placed a nice leaf of lettuce at one end of his patio. Then, he placed his tortoise 5 meters away from the lettuce and recorded its position and time as it moved toward the lettuce.

The chart below shows Henry's observations.

Tortoise Distance and Time Results

Tortoise's Distance from Starting Point (in meters)	Elapsed Time (in seconds)	
0 (at starting point)	0	
1	12	
2	24	
3	36	
4	48	
5 (at lettuce)	60	

After 24 seconds, how far away from the sto •• A. 4 meters	r 24 seconds, how far away from the starting point was the tortoise? O C. 0 meters			
O B. 3 meters	O D. 2 meters			
7. Sarah is vacuuming the living room floor make the vacuum move back and forth?	r for her mother. What type of force is Sarah using to			
O A. She is not using any force.	O C. pulling force only			
O B. pushing and pulling forces	OD. pushing force only			
8. Look at the picture. The cat is the	table.			
O A. underneath				
O B. inside	10 01			
O C. beside	Åt tÅ			
OD. on top of				

O A. It will change direction.	oc. It will stop.	
It will continue in the same direction it O B. was moving before she hit it.	There is not D. answer the	information given to question.
 10. Oliver and his older brother like to play pool togwill barely go far enough to hit another ball on the brother takes a shot, the cue ball hits another ball of A. Oliver's brother is taller. B. Oliver's brother can shoot with greater force. C. Oliver can shoot with greater force. 	other end of the ta	ble. But when Oliver's
O. There is no reason.		***
11. Look at the picture. The bird is the cage	÷.	
O A. underneath	O C. above	
OB. inside of	O D. below	
O B. inside of 12. What kind of force between the bat and the bat		player hit a home run?
		orce
12. What kind of force between the bat and the book of	C. a pushing for D. a pulling for moving. Which of the	orce ce

9. Brandon and Callie are playing tennis. Brandon serves the tennis ball over the net to Callie. When Callie hits the ball with her racquet, what will most likely happen to the motion of the ball?

14. The force of pulls objects down to Earth	٦.				
O A. movement	OC. gravity				
O B. heat	O D. speed				
15. The table lists the weight of four blocks.					
		Block Number	Weight of Block		
The four blocks are each pushed with the same amount of force.		1	1 kg		
Which block will move the fastest? • A. Block 3	C. Block 4	2	5 kg		
O B. Block 1	D. Block 2	3	10 kg		
		4	50 kg		
16. Tina and Jill have two balls, ball A and ball B. B push the balls with the same strength across the so Which ball will roll faster?		eavy as ball B. Tir	na and Jill		
O A. Neither ball will roll at all.	O C. Ball A will	roll faster.			
O B. Ball B will roll faster.	O D. Ball A and ball B will roll at the same speed.				
17. Wind is blowing from the north to the south. The the boat move	e wind pushes the	sails of a boat c	and makes		
O A. south.	Oc. east.	O C. east.			
OB. north.	O D. west.				
18. The force of gravity					
O A. pushes objects away from the Earth.	O C. pulls obje	• C. pulls objects towards the Earth.			
OB. pushes the Earth away from objects.	O D. can be se	O D. can be seen with special glasses.			
19 is a measure of the distance an obje	ct travels in a cert	ain amount of t	ime.		
O A. Length	OC. Weight	O. C. Weight			
O B. Energy	O D. Speed				