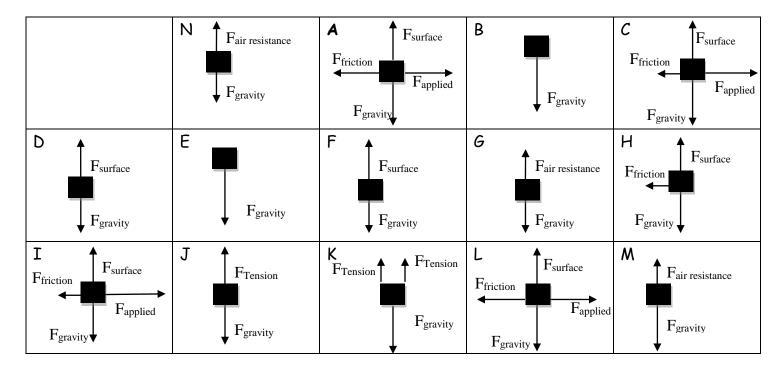
Free Body Diagrams-Cut and Tape

CUT OUT PAGE!

Instructions:

- Cut out the pictures (free body diagrams) below.
- Match the pictures (free body diagrams) with the correct word descriptions on the answer sheets.
- Tape/Glue them on the answer sheet and complete the chart by filling in all the columns.



Free B	ody D	iagrams-	·Cut	and	Tape
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Name(s)		
()	Block	

TAPE/GLUE DIAGRAMS HERE AND FILL IN THE OTHER TWO COLUMNS!

Word Description	Free Body Diagram (Picture)	Are the forces all balanced? aka (Is the object in equilibrium?)	Is the object accelerating? If yes, in which direction?
<u>1</u> -Falling on the moon-no air drag			
2 -At rest on the table- no horizontal forces			
<u>3</u> -Falling on Earth at terminal velocity			
4 -Falling on Earth, but terminal velocity not yet reached			
<u>5</u> -A book is at rest on a tabletop			
<u>6</u> -Rolling along a surface with applied force and friction at constant velocity			
7 -True free fall-no force opposes the weight			

Word Description	Free Body Diagram (Picture)	Are the forces all balanced? aka (Is the object in equilibrium?)	Is the object accelerating? If yes, in which direction?
8 -Rolling along a surface with applied force and friction with one greater than the other			
9 -A gymnast is suspended motionless from a bar which hangs from the ceiling by two ropes			
10-A college student rests a backpack upon one shoulder			
11-A car is coasting to the right and slowing down			
12-A flying squirrel is gliding (no wing flaps) to the ground at constant velocity			
13-A horizontal force is applied to an object in order to accelerate it			