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| G:\Logos\Logos 0708\GriffinRW.jpg Physics | Topic/ Objective:  Unit 3: Forces | Name: |
| Period: Date: |
| Essential Question: How can forces predict motion? | | |
| Questions: | Notes: | |
| How do scientists describe and measure forces? | When forces are combined, \_\_\_\_\_\_\_\_ forces can be added. Note: \_\_\_\_\_\_\_\_\_\_ are established using (+) and (-) signs.  When forces are in opposite directions, the \_\_\_\_\_ force is the in \_\_\_\_\_\_\_\_\_ of the largest force.  When multiple forces act on object,  all of the forces can be added together to find the  \_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_ (\_\_\_\_or\_\_\_\_\_) on the object. | |
| How do forces combine? |
| Force Vector Addition Samples:      + 4N + + 3N = + 7N  + 4N + - 3N = + 1N  Magnitude: Angle: \*  (4N)2 + (3N)2 = R2 θ = tan -1 (3N/4N)  116N2 + 9N2 = R2 θ = 37o  25N2 = R2  5N = R \* ALG II students only  Mac HD:Users:913071:Desktop:Screen Shot 2014-10-27 at 4.51.33 PM.png | |
|  | Mac HD:Users:913071:Desktop:Screen Shot 2014-10-30 at 8.44.35 AM.png  When the net force is \_\_\_\_\_, the forces are \_\_\_\_\_\_\_\_\_\_\_\_.  velocity stays the same.  Mac HD:Users:913071:Desktop:Screen Shot 2014-10-30 at 8.44.35 AM.png  When the net force is \_\_\_ \_\_\_\_ the forces are \_\_\_\_\_\_\_\_\_.  velocity changes ACCELERATION OCCURS!! | |
| Summary: | | |
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| Questions: | Notes: |
|  | When the \_\_\_\_ are \_\_\_\_\_\_\_\_:    FNET = \_\_\_\_ or ΣF = \_\_\_\_  The object is at rest so (v = 0 and a = 0) . . . . .  This is called \_\_\_\_ \_\_\_\_\_\_\_\_.  OR  The object moves at \_\_\_\_ \_\_\_\_ (v≠ 0 and a = 0) . . .  This is called \_\_\_\_ \_\_\_\_\_\_\_\_. |
| When The \_\_\_\_ are \_\_\_\_ \_\_\_\_\_\_\_\_:  FNET ≠ \_\_\_\_ or ΣF ≠ \_\_\_\_  The velocity is \_\_\_\_ (a ≠ 0)  The object is \_\_\_\_ (velocity is changing)    This is called Disequilibrium. |
| Summary: | |
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