Name: Period:

1-Dimensional Free Body Diagrams

*Draw and label the vectors for the following diagrams.*

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| 1. A hanging mass suspended by a string: |  |
| 2. A block at rest on a surface: | *v* |
| 3. A block sliding at constant speed without friction: | *a* |
| 4. A block being accelerated to the right by being pulled with a string- no friction: | *a* |
| 5. A block being accelerated to the right by being pulled by a string- with friction: |  |

|  |  |
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| 6. A block moving to the right at a constant velocity with friction: | *v* |
| 7. A block sliding to a stop due to friction: |  |
| 8. An object in free fall: | *v* |
| 9. An object falling at terminal velocity- the net force on the object is zero: | *v* |
| 10. A mass hanging from a spring: |  |