## The example data object

|  | A | B | c | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | t | ax | ay | az | Scr |
| 2 | 0 | 0.3931848 | -0.1593144 | -0.4178079 | 0 |
| 3 | 0.01 | 0.3957354 | -0.15696 | -0.4242825 | 0 |
| 4 | 0.04 | 0.4138839 | -0.1547037 | -0.429678 | 0 |
| 5 | 0.05 | 0.4415481 | -0.1512702 | -0.4325229 | 0 |
| 6 | 0.06 | 0.4741173 | -0.1488177 | -0.434583 | 0 |
| 7 | 0.08 | 0.5021739 | -0.1521531 | -0.4285008 | 0 |
| 8 | 0.1 | 0.5247369 | -0.1669662 | -0.420849 | 0 |
| 9 | 0.11 | 0.5421987 | -0.1813869 | -0.4160421 | 0 |
| 10 | 0.14 | 0.5506353 | -0.1947285 | -0.4094694 | 0 |
| 11 | 0.15 | 0.5538726 | -0.203067 | -0.4057416 | 0 |
| 12 | 0.16 | 0.5534802 | -0.2035575 | -0.4056435 | 0 |
| 13 | 0.17 | 0.5527935 | -0.1961019 | -0.4098618 | 0 |
| 14 | 0.2 | 0.558189 | -0.1908045 | -0.4121181 | 0 |
| 15 | 0.21 | 0.5764356 | -0.1865862 | -0.4162383 | 0 |
| 16 | 0.22 | 0.589581 | -0.18639 | -0.4258521 | 0 |
| 17 | 0.25 | 0.6049827 | -0.1941399 | -0.4243806 | 0 |
| 18 | 0.26 | 0.619992 | -0.206991 | -0.4192794 | 0 |
| 19 | 0.27 | 0.6320583 | -0.2191554 | -0.4092732 | 0 |
| 20 | 0.3 | 0.6392196 | -0.2279844 | -0.3975993 | 0 |
| 21 | 0.31 | 0.6465771 | -0.2317122 | -0.3908304 | 0 |
| 22 | 0.32 | 0.6583491 | -0.2291616 | -0.3950487 | 0 |
| 23 | 0.34 | 0.6725736 | -0.2220984 | -0.4050549 | 0 |

## Example data - what it really shows

Time

|  | A | в | c | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | t | x | ay | az | scr |
| 2 | 0 | 0.3931848 | -0.1593144 | -0.4178079 | 0 |
| 3 | 0.01 | 0.3957354 | -0.15696 | -0.4242825 | 0 |
|  | 0.04 | 0.4138839 | -0.1547037 | -0.429678 | 0 |
| 5 | 0.05 | 0.4415481 | -0.1512702 | -0.4325229 | 0 |
| 6 | 0.06 | 0.4741173 | -0.1488177 | -0.434583 | 0 |
| 7 | 0.08 | 0.5021739 | -0.1521531 | -0.4285008 | 0 |
| 8 | 0.1 | 0.5247369 | -0.1669662 | -0.420849 | 0 |
| 9 | 0.11 | 0.5421987 | -0.1813869 | -0.4160421 | 0 |
| 10 | 0.14 | 0.5506353 | -0.1947285 | -0.4094694 | 0 |
| 11 | 0.15 | 0.5538726 | -0.203067 | -0.4057416 | 0 |
| 12 | 0.16 | 0.5534802 | -0.2035575 | -0.4056435 | 0 |
| 13 | 0.17 | 0.5527935 | -0.1961019 | -0.4098618 | 0 |
| 14 | 0.2 | 0.558189 | -0.1908045 | -0.4121181 | 0 |
| 15 | 0.21 | 0.5764356 | -0.1865862 | -0.4162383 | 0 |
| 16 | 0.22 | 0.589581 | -0.18639 | -0.4258521 | 0 |
| 17 | 0.25 | 0.6049827 | -0.1941399 | -0.4243806 | 0 |
| 18 | 0.26 | 0.619992 | -0.206991 | -0.4192794 | 0 |
| 19 | 0.27 | 0.6320583 | -0.2191554 | -0.4092732 | 0 |
| 20 | 0.3 | 0.6392196 | -0.2279844 | -0.3975993 | 0 |
| 21 | 0.31 | 0.6465771 | -0.2317122 | -0.3908304 | 0 |
| 22 | 0.32 | 0.6583491 | -0.2291616 | -0.3950487 | 0 |
| 23 | 0.34 | 0.6725736 | -0.2220984 | -0.4050549 | 0 |

## Example data - what it really shows

D

| Time | 1 | t | ax | ay | az | Scr |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2 | 0 | 0.3931848 | -0.1593144 | -0.4178079 | 0 |
| Biomechanical acceleration | 3 | 0.01 | 0.3957354 | -0.15696 | -0.4242825 | 0 |
|  | 4 | - 0.04 | 0.4138839 | -0.1547037 | -0.429678 | 0 |
|  | 5 | 0.05 | 0.4415481 | -0.1512702 | -0.4325229 | 0 |
|  | 6 | 0.06 | 0.4741173 | -0.1488177 | -0.434583 | 0 |
|  | 7 | 0.08 | 0.5021739 | -0.1521531 | -0.4285008 | 0 |
|  | 8 | 0.1 | 8.5247369 | -0.1669662 | -0.420849 | 0 |
|  | 9 | 0.11 | 0.5421987 | -0.1813869 | -0.4160421 | 0 |
|  | 10 | 0.14 | 0.5506353 | -0.1947285 | -0.4094694 | 0 |
|  | 11 | 0.15 | 0.5538726 | -0.203067 | -0.4057416 | 0 |
|  | 12 | 0.16 | 0.5534802 | -0.2035575 | -0.4056435 | 0 |
|  | 13 | 0.17 | 0.5527935 | -0.1961019 | -0.4098618 | 0 |
|  | 14 | 0.2 | 0.558189 | -0.1908045 | -0.4121181 | 0 |
|  | 15 | 0.21 | 0.5764356 | -0.1865862 | -0.4162383 | 0 |
|  | 16 | 0.22 | 0.589581 | -0.18639 | -0.4258521 | 0 |
|  | 17 | 0.25 | 0.6049827 | -0.1941399 | -0.4243806 | 0 |
|  | 18 | 0.26 | 0.619992 | -0.206991 | -0.4192794 | 0 |
|  | 19 | 0.27 | 0.6320583 | -0.2191554 | -0.4092732 | 0 |
|  | 20 | 0.3 | 0.6392196 | -0.2279844 | -0.3975993 | 0 |
|  | 21 | 0.31 | 0.6465771 | -0.2317122 | -0.3908304 | 0 |
|  | 22 | 0.32 | 0.6583491 | -0.2291616 | -0.3950487 | 0 |
|  | 23 | 0.34 | 0.6725736 | -0.2220984 | -0.4050549 | 0 |

## Example data - what it really shows

Time
Biomechanical
acceleration
Pendrill, A.-M., Eager, D.(2020). "Velocity, acceleration, jerk,
snap and vibation. forces in our bodies during a roller coaster snap and vibration: forces in our bodies during a roller coaster
ride." Phys. Educ. 55065012

|  | A | в | c | D | E |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | t | ax | ay | az | Scr |  |
| 2 | 0 | 0.3931848 | -0.1593144 | -0.4178079 | 0 | Scream |
| 3 | 0.01 | 0.3957354 | -0.15696 | -0.4242825 | 0 | detected |
| 4 | - 0.04 | 0.4138839 | -0.1547037 | -0.429678 | 0 |  |
| 5 | 0.05 | 0.4415481 | -0.1512702 | -0.4325229 |  |  |
| 6 | 0.06 | 0.4741173 | -0.1488177 | -0.434583 | 0 |  |
| 7 | 0.08 | 0.5021739 | -0.1521531 | -0.4285008 | 0 |  |
| 8 | 0.1 | 6. 5247369 | -0.1669662 | -0.420849 | 0 |  |
| 9 | 0.11 | 0.5421987 | -0.1813869 | -0.4160421 | 0 |  |
| 10 | 0.14 | 0.5506353 | -0.1947285 | -0.4094694 | 0 |  |
| 11 | 0.15 | 0.5538726 | -0.203067 | -0.4057416 | 0 |  |
| 12 | 0.16 | 0.5534802 | -0.2035575 | -0.4056435 | 0 |  |
| 13 | 0.17 | 0.5527935 | -0.1961019 | -0.4098618 | 0 |  |
| 14 | 0.2 | 0.558189 | -0.1908045 | -0.4121181 | 0 |  |
| 15 | 0.21 | 0.5764356 | -0.1865862 | -0.4162383 | 0 |  |
| 16 | 0.22 | 0.589581 | -0.18639 | -0.4258521 | 0 |  |
| 17 | 0.25 | 0.6049827 | -0.1941399 | -0.4243806 | 0 |  |
| 18 | 0.26 | 0.619992 | -0.206991 | -0.4192794 | 0 |  |
| 19 | 0.27 | 0.6320583 | -0.2191554 | -0.4092732 | 0 |  |
| 20 | 0.3 | 0.6392196 | -0.2279844 | -0.3975993 | 0 |  |
| 21 | 0.31 | 0.6465771 | -0.2317122 | -0.3908304 | 0 |  |
| 22 | 0.32 | 0.6583491 | -0.2291616 | -0.3950487 | 0 |  |
| 23 | 0.34 | 0.6725736 | -0.2220984 | -0.4050549 | 0 |  |



## DISCLAIMER

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You can find more information about this course on Github.

