List of subject for collaboration between Physics and Math

* Pendulum/Clock\*
* Absorption of light\*
* Harmonic oscillation/sound\*
* Lift off of a plane\*
* Path of Mars\*
* High and low tide
  + Physics:
    - forces of planets on earth
    - Collecting data of high and low tide
    - Data analysis
    - Period determination
  + Math
    - Sinus and cosinus
    - Data analysis
    - Periodic functions adding
* Kinematics/derivatives
  + Math
    - Slope
    - Gradient
    - Average slope
    - Differentiation
  + Physics
    - Relation between (s,t) diagram and (v,t) and (a,t) diagram
    - Velocity (average and on a moment)
    - Surface below 🡪 displacement
    - Slope 🡪 velocity or acceleration
    - Measurements
    - Walking with ranger
* Measure energy
* Radioactivity/probability
  + Math
    - Probability
    - Statistics
    - Graphing
    - Derivatives
  + Physics
    - Formulas of decay
    - Relationship between N(t) and A(t)
    - Understanding of probability nature of decay
* Data analysis
  + Math
    - Statistics (mean, sdev, gaussian curves)
    - Curve fitting
  + Physics
    - Finding relationship between entities
    - Reliability of measurements
* Condensator
  + Math
    - Funcition fitting
    - Integrating
    - Differentiation
  + Physics
    - Working of capacitor
    - Modelling
    - Formulas and relationship between I and Q
* Radioactivity/exponential function
  + Math
    - Exponential functions
    - Halfworth time/depth
    - Fitting functions
    - Data analysis
  + Physics
    - Formulas of N, I and A
    - Relationship between these relationships
* Climate modelling
* Optics/geometry
  + Math
    - Mirroring
    - Proving of relationships between lines and angles
    - Using relationships in triangles
  + Physics
    - Math under physics formulas
    - Mirroring of light

\* Of this subjects more detailed descriptions are available in the folder.