**Graphical user interface

Description automatically generated with medium confidenceHeat Radiation** (Phys)

RAG your understanding.

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| --- | --- | --- | --- |
|  | **Start of Topic** | **End of Topic** | **Revised** |
| P.1.2.1.a. - I can describe the relationship between thermal conductivity and the rate of energy transfer by conduction across the material. |  |  |  |
| P.1.2.1.b. - I can describe how the rate of cooling of a building is affected by the thickness and thermal conductivity of its walls. |  |  |  |
| **Black Body Radiation (Physics Only)** |  |  |  |
| **Required practical: I know how to investigate the effectiveness of different materials as thermal insulators and the factors that may affect the thermal insulation properties of a material** |  |  |  |
| **P.6.3.1.a. - I know that all objects emit infrared radiation and can describe the relationship between the temperature of a body and the amount of infrared radiation it emits in a given time.** |  |  |  |
| **P.6.3.1.b. - I can describe a perfect black body as an object that absorbs all of the radiation incident on it and a perfect black body would be the best possible emitter of infrared radiation.** |  |  |  |
| **P.6.3.2.a. - I can that the intensity and wavelength distribution of any emission depends on the temperature of an object.** |  |  |  |
| **P.6.3.2.b. - I can explain how the temperature of a body is related to the balance between incoming radiation absorbed and radiation emitted and apply this concept to everyday situations as well as the factors that determine the temperature of the Earth.** |  |  |  |
| P.3.2.2. - I can describe how the temperature change of a system depends on the mass of the substance heated, the type of material and the energy input to the system. |  |  |  |
| P.3.2.2.b. - I can define the term specific heat capacity and I can apply the equation: E=mCΔθ |  |  |  |
| P.3.2.3.a. - I can define the term specific latent heat and apply the equation E=mL. |  |  |  |
| P.3.2.3.b. - I can explain that the energy supplied during a change of state changes the internal energy, but not the temperature and I can interpret heating and cooling graphs that include changes of state. |  |  |  |

**BOLD = PHYSICS ONLY**