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## Joule and energy

🔊 Listen

The formulation of the mechanical equivalent of heat can be taken as a crucial step towards the formulation of the principle of energy conservation. Joule demonstrated in a series of experiments that mechanical work (which he still called 'mechanical force') can be converted at a constant ratio into heat.

Story n° 1. This story addresses the necessity of careful experimenting in the process of generating new scientific knowledge.

[The hard work of experimenting: James Prescott Joule and the mechanical equivalent of heat.](#)

Story n° 2. This story addresses the issues of social status and collaboration.

[Scientific Partnership: James Prescott Joule, William Thomson, and the mechanical equivalent of heat.](#)

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