11.23. **Visualize:**

At the top of the slide, the child has gravitational potential energy of 588 J. This energy is transformed into thermal energy of the child’s pants and the slide and the kinetic energy of the child. This energy transfer and transformation is shown on the energy bar chart.

(b) **Energy (J)**

The change in the thermal energy of the slide and of the child’s pants is 588 J – 40 J = 548 J.