

# Lesson 2: Energy Stores and Pathways

Mrs Evans



# Independent Practice: complete the table

	mJ	J	kJ
a	?	3	?
b	?	45	?
c	230	?	?
d	?	?	6.8



# Independent Practice: answer the questions

What are the units of energy?

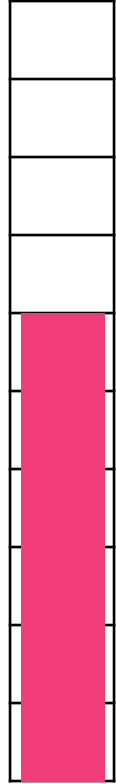
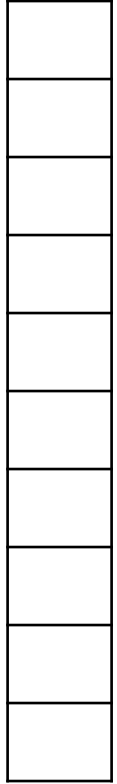
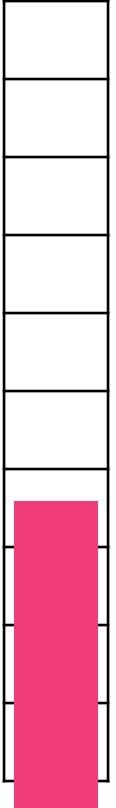
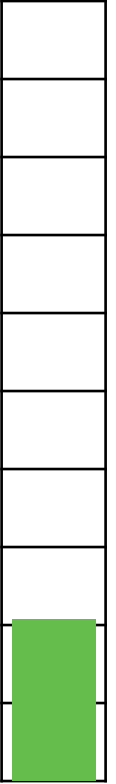
Who are the units named after?

What is 1000 J equal to?

What is the law of conservation of energy?



# Independent practice: complete the gaps for stretching a rubber band

Energy store(s) before transfer	Pathway (choose one)	Energy store(s) after transfer
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>? — store</p>  </div> <div style="text-align: center;"> <p>? — store</p>  </div> </div>	<div style="display: flex; flex-direction: column; align-items: center; gap: 10px;"> <input type="checkbox"/> mechanical           <input type="checkbox"/> electrical <input type="checkbox"/>              heating           <input type="checkbox"/> radiation         </div>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>? — store</p>  </div> <div style="text-align: center;"> <p>? — store</p>  </div> </div>

$\underline{\quad} \overset{?}{\cdot} \underline{\quad}$        $\underline{\quad} \overset{?}{\cdot} \underline{\quad}$

Total before: \_ ? \_

$\underline{\quad} \overset{?}{\cdot} \underline{\quad}$        $\underline{\quad} \overset{?}{\cdot} \underline{\quad}$

Total after: \_ ? \_



# Independent practice: fill the gaps

a. A mobile phone is switched on. Energy is transferred from the \_\_\_\_ ? \_\_\_\_ store in the battery to the \_\_\_\_ ? \_\_\_\_ store of surroundings, by heating and radiation (sound and light).

elastic potential	gravitational potential	chemical
thermal		kinetic

b. 400 J of energy is transferred. 150 J is transferred by heating, how much energy is transferred by radiation? \_\_\_\_ ? \_\_\_\_

