

1. a. Complete the table below about energy stores using the words or phrases from the list. Use each word or phrase once, more than once, or not at all.

moving   vibrating   speed up   chemical   spring   thermal   lifted up   slow down

Type of store	Transferred to/from this store when...
gravitational potential	objects are .....
kinetic	objects ..... or .....
.....	heating up or cooling down.
elastic potential	stretching a .....
..... potential	using a battery.

- b. Name four ways of transferring energy.

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2. Read the information in the box then answer the questions below.

Mina gets on her bike to meet her friend at the cinema. They walk upstairs to find their seat. The music at the start of the film is very loud. They enjoy seeing the people in the film. They go downstairs and leave the cinema. On the way home they buy some food.

Each sentence talks about an energy store or transfer. Name the store or transfer in each sentence.

- It's transfer energy, so it's kinetic energy.
- They're moving, so it's transfer energy (kinetic).
- It's transfer energy, because the sound is very loud (sound).
- It's transfer energy, because they are watching film (light).
- It's store energy, because gravity helps them go down (GPE).
- It's store energy, because they ate food (chemical).

### Extension

- a. A student is making notes about nuclear energy but is confused. Write out a correct version of her notes.

- The reaction that produces energy in the Sun is a chemical reaction.
- Nuclear fusion happens when uranium breaks down.
- Nuclear fission happens when uranium combines.
- The fuel in a nuclear power station is hydrogen gas.

- b. Explain why the Sun cannot be a huge ball of fire.