1.3 Energy stores and transfers

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 lifted up
kinetic	objects moving or vibrating
Thermal	heating up or cooling down.
elastic potential	stretching a spring.
chemical potential	using a battery.

b. Name four ways of transferring energy.

1- kinetic transferred when something moves.

2- thermal energy is transferred whe something is heated

3- elastic energy is transferred when we move an elastic material

4- gravitational potential is transferred when something is lifted up

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.

a. Kinetic energy.

b. Gravitational potential energy

c. Sound energy

d. Light energy.

e. kinetic energy

f. Chemical energy.

Extension

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

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

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