

# Energy

## 2. Energy transfers

### CONCEPT 1

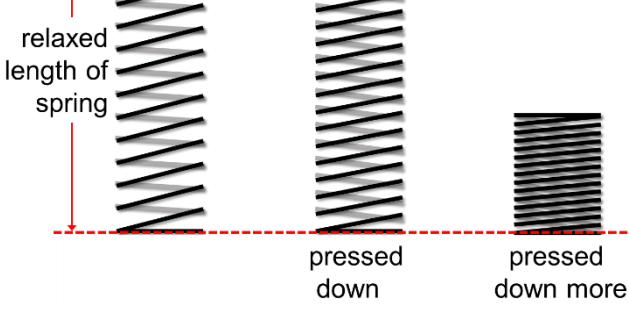
### TEST YOURSELF

#### ENERGY STORES AND TRANSFERS

##### KNOW

- Q1 Name the 8 energy stores.
- Q2 (a) Which energy store is filled with joules when an object is moving?  
(b) Which energy store in the body is filled when we eat food?
- Q3 What type of transfer of energy takes place when you lift your school bag up off the floor?

##### APPLY

- Q4 Look at diagram of a spring. It shows a spring without being compressed as well as how it might look as it is pressed down.
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- The diagram shows three vertical springs. The first spring is at its natural length, with a red dashed line above it and a red double-headed arrow labeled 'relaxed length of spring' indicating the distance to a lower red dashed line. The second spring is shorter, with the label 'pressed down' below it. The third spring is the shortest, with the label 'pressed down more' below it.
- (a) What energy store is being filled when the spring is pressed?
- (b) As it is pressed down and then pressed down more, what is happening the number of joules in its energy store?
- Q5 Draw a simple energy transfer diagram for the following:
- (a) dropping an apple from a height
- (b) powering a motor with a battery

##### EXTEND

- Q6 Explain why a bouncing ball will eventually come to rest on the ground.