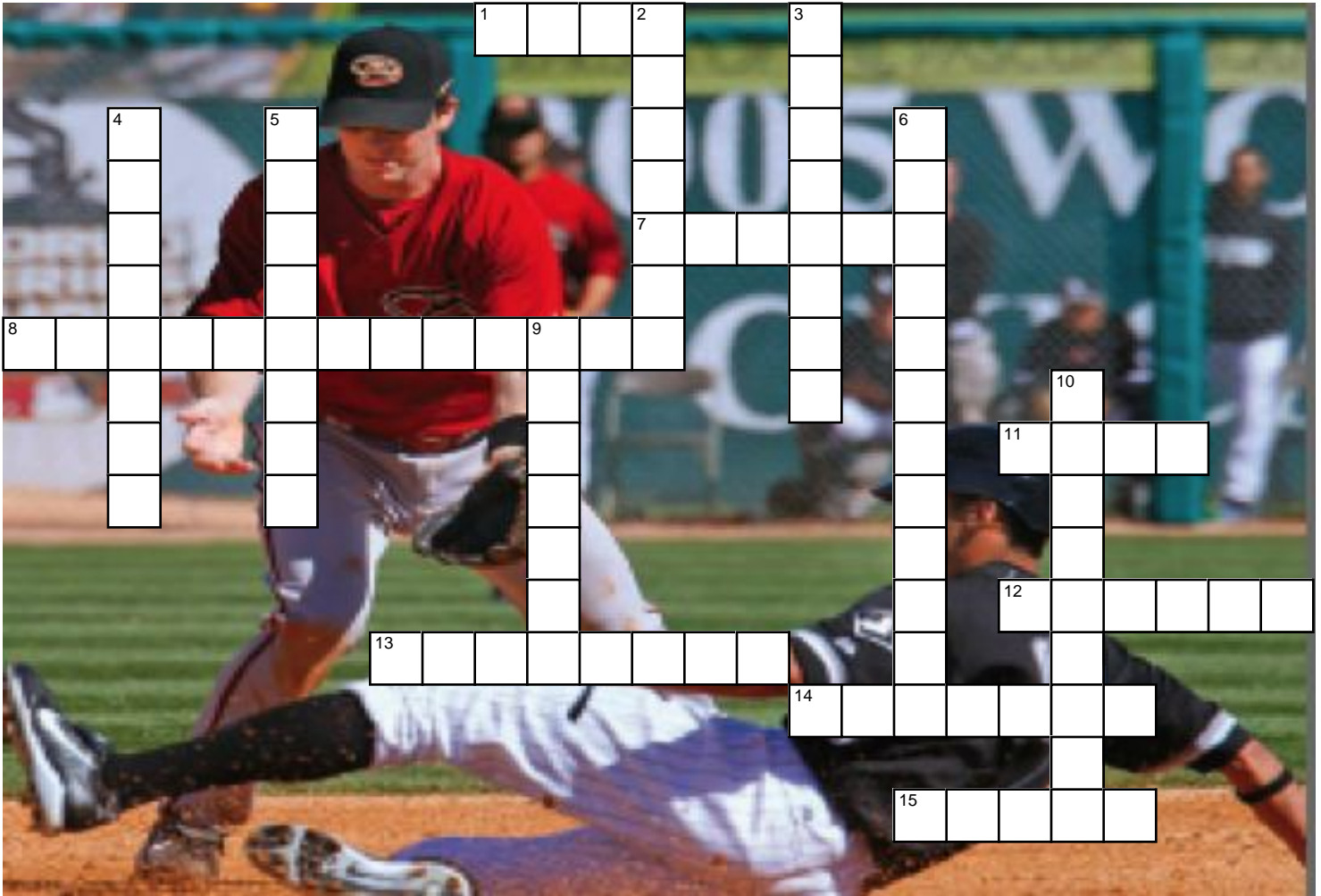


## 4.2 Work And Energy



### Across

1. When thermal energy transfers to another object or substance it is called \_\_\_\_\_.
7. The term "kinetic" comes from the Greek word "kinema," which means \_\_\_\_\_.
8. The potential energy of an object that is able to fall is called \_\_\_\_\_ potential energy.
11. \_\_\_\_\_ is done when a force causes something to move and energy is transferred.
12. \_\_\_\_\_ is the ability to do work.
13. During any transfer of energy the total amount of energy remains \_\_\_\_\_.
14. \_\_\_\_\_ energy is the energy due to an object's motion.
15. The metric unit for energy is the \_\_\_\_\_ (J).

### Down

2. \_\_\_\_\_ energy is the total amount of all the kinetic energy of all the particles in an object or substance.
3. Gasoline and batteries store \_\_\_\_\_ potential energy.
4. The amount of work done depends on the amount of force exerted and the \_\_\_\_\_ over which the force is applied.
5. When \_\_\_\_\_ does work on an object some of the object's energy is transformed into thermal energy.
6. You cannot create or destroy energy. You can only transfer the energy from one object to another or transform the energy from one form to another. This is called the law of \_\_\_\_\_ of energy.
9. (Work in joules) = (Force in \_\_\_\_\_) \* (distance in metres)
10. \_\_\_\_\_ energy is stored energy.