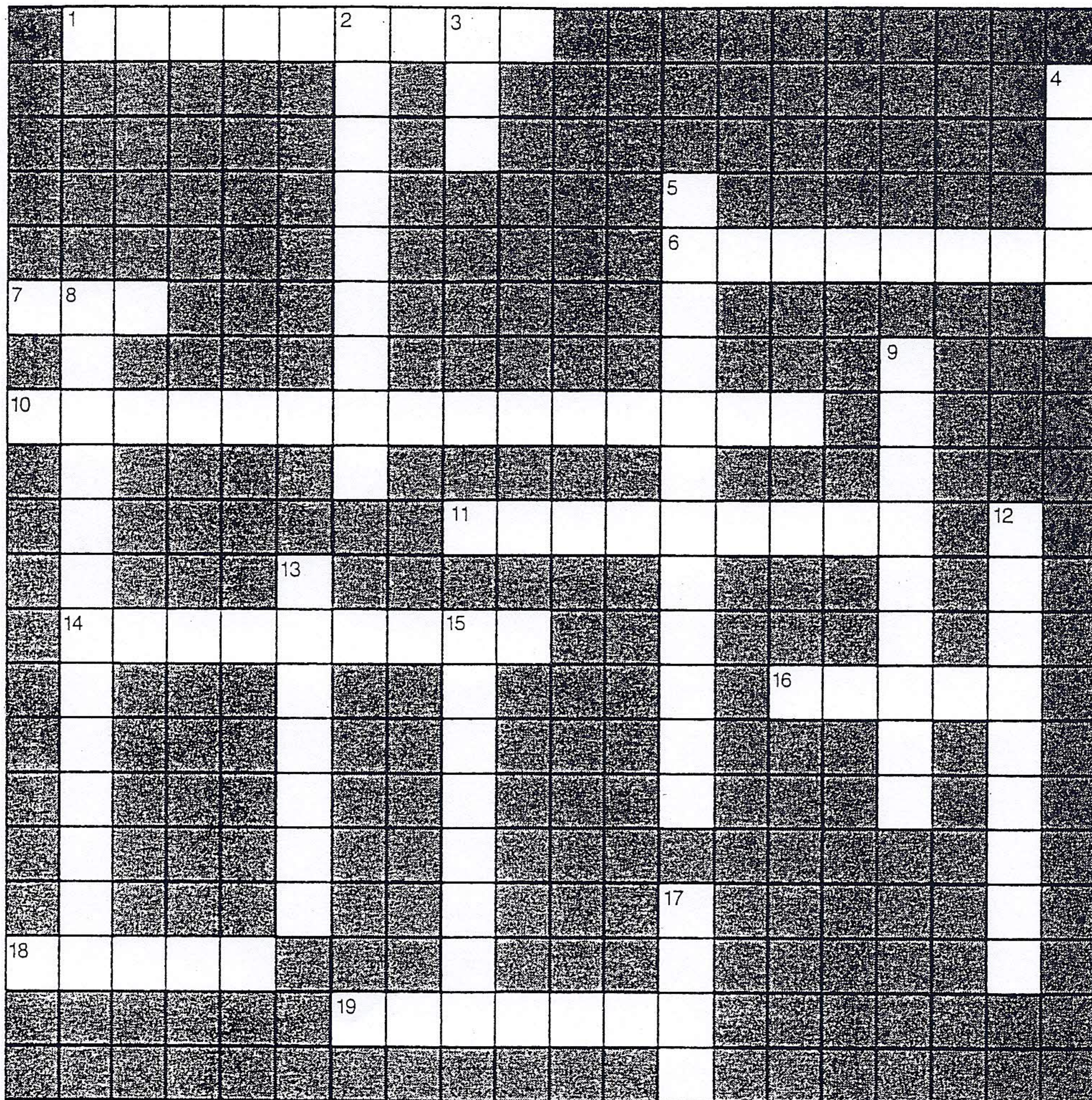


How does the cell capture the energy of organic molecules in ATP? Review the basic concepts by completing this crossword puzzle.



*Across*

1. The cell transfers energy by shuttling \_\_\_\_ from molecule to molecule.
6. Energy released in the electron transport chain moves \_\_\_\_ ions ( $H^+$ ) across a membrane.
7. ATP is made from \_\_\_\_ and inorganic phosphate.
10. Substrate-level \_\_\_\_ is a simpler way to make ATP than chemiosmotic phosphorylation.
11. A sequence of electron carriers forms the electron \_\_\_\_ chain.
14. \_\_\_\_ is loss of an electron.
16. A molecule such as glucose is oxidized when it \_\_\_\_ an electron.
18. \_\_\_\_ is short for "oxidation-reduction."
19. Oxygen is \_\_\_\_ in cellular respiration.

*Down*

2. \_\_\_\_ is gain of an electron.
3. A coenzyme called \_\_\_\_ is used to carry hydrogen atoms in redox reactions.
4. A molecule is reduced when it \_\_\_\_ an electron.
5. Most cells make most of their ATP via a process called \_\_\_\_.
8. A \_\_\_\_ enzyme strips hydrogen atoms from organic molecules.
9. ATP \_\_\_\_ use energy from a gradient of ion concentration to make ATP.
12. In substrate-level phosphorylation an enzyme transfers a \_\_\_\_ group to ATP.
13. NADH delivers electrons to an electron \_\_\_\_.
15. Glucose is \_\_\_\_ in cellular respiration.
17.  $NAD^+$  picks up electrons and hydrogen, forming \_\_\_\_.