

# WARD'S<sup>TM</sup>

## Free-Living Protozoa

### Instructions:

This key will aid students in the identification of protozoa normally encountered in our cultures. Line drawings of each protozoan, along with designations of size range, are included inside this sheet. It is suggested that DETAIN, WARD'S protozoan slowing agent, be used to slow the faster-moving protozoa. A wet mount preparation should first be scanned under low power magnification to initially locate protozoa for observation and identification. In some cases, identification will be made easier if cells are examined under "high-dry" magnification (450X).

Identification of a protozoan may be made by either comparing the observed cell to the illustrations on this sheet or by using the key. The key gives the student two choices per number. Start at number 1, comparing the observed protozoan to each of the characteristics stated per number in the key. Proceed according to the key until it terminates in the name of the protozoan.

1. White or colorless . . . . . 2  
Colored . . . . . 8
2. Creeping (sliding) slowly or floating without apparent motion . . . . . 3  
Exhibits other motion . . . . . 7
3. Spherically shaped with radiating "spines" . . . . . Actinosphaerium  
Not spherical in shape . . . . . 4
4. Shape remains constant . . . . . 5  
Shape constantly changes . . . . . 6
5. Possesses flattened test or shell without embedded or attached material; pale to brown in color . . . . . Arcella  
Possesses dome-shaped test or shell with attached particles, usually of sand . . . . . Diffflugia
6. Small; creeps using pseudopodia (false feet); single disc-shaped nucleus . . . . . Amoeba  
Large; creeps using pseudopodia; many (100's) of small nuclei . . . . . Pelomyxa
7. Cell has hair-like structures (cilia) . . . . . 16  
Cell's organ of locomotion is long whip-like flagella (no cilia) . . . . . 9
8. Green color . . . . . 9  
Color not green . . . . . 23
9. Colony of many cells . . . . . 11  
Single, motile cells . . . . . 10
10. One observed locomotor flagella . . . . . 15  
Two observed locomotor flagella . . . . . 14