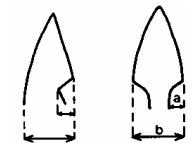
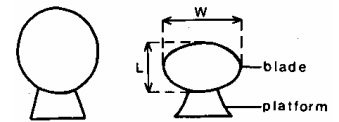
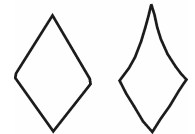


## APPENDIX 1.1

Coded utilitarian ichthyolith identification system step 1. To determine the “**general outline**” of the ichthyolith, select one or more characters from the list below. <sup>2</sup>

**a. General outline:** <sup>2</sup>

0. indeterminate
1. none of the following <sup>2, 8, 9, 19, 31</sup>
2. elliptical or lanceolate, one edge acutely dentate; may have platform or pedicle <sup>2, 4, 8, 9, 19, 31, 32</sup>
3. polygonal without a platform or pedicle <sup>2, 9, 19, 31</sup>
4. lanceolate or somewhat polygonal with a platform or pedicle <sup>2, 9, 19, 31</sup>
5. circular to elliptical with a platform or pedicle; if elliptical, width greater than length <sup>2, 8, 9, 19, 31</sup>
6. elliptical with a platform or pedicle; length greater than width <sup>2, 8, 9, 19, 31</sup>
7. approximately triangular with two or three lateral projections <sup>9, 19</sup>
8. approximately triangular with straight or curved axis, and with a prominent angular flexure (*a* must be at least 0.2 the length of *b*) of one or both margins <sup>2, 8, 9, 19</sup>
9. approximately triangular or conical with straight or curved axis, and without prominent flexure of either margin <sup>2, 8, 9, 19</sup>
10. multicuspid with cusps of equal size <sup>9, 19</sup>



11. multicuspid with cusps of unequal size <sup>9, 19</sup>



12. dome-shaped <sup>9, 19</sup>



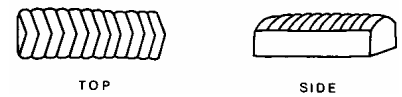
13. mushroom-shaped with rounded or flattened surface, with a platform or pedicle <sup>9, 19, 31, 32</sup>



14. pyramid-shaped <sup>9, 19</sup>



15. bar-shaped <sup>9, 19</sup>



16. circular to subcircular without a platform or pedicle <sup>19, 31</sup>



17. Sail-shaped, crown triangular, taller than wide, and with curved diagonal on a flaring pedicle that is broader at its basal edges than crown <sup>30, 31</sup>

