Use this key with the Fish Classification activity. Take each fish through the key starting each time with decision point 1. Follow the key where it takes you, you may need to use the internet to help you identify various parts of the fish anatomy. Ultimately you will identify the species name of each fish; No two fish have the same name.

Table 3–4. Word key to the butterflyfish of the genus *Chaetodon*

<table>
<thead>
<tr>
<th>Decision Point</th>
<th>Choices</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pelvic fin dark</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pelvic fin light</td>
<td></td>
</tr>
<tr>
<td>2 (1)</td>
<td>Two large white spots below dorsal fin</td>
<td><em>C. quadrimaculatus</em></td>
</tr>
<tr>
<td></td>
<td>Lacks two large white spots below dorsal fin</td>
<td></td>
</tr>
<tr>
<td>3 (2)</td>
<td>Tail with two dark bars at tip</td>
<td><em>C. reticulatus</em></td>
</tr>
<tr>
<td></td>
<td>Tail with one dark bar at tip</td>
<td><em>C. kleini</em></td>
</tr>
<tr>
<td>4 (1)</td>
<td>Posterior or dorsal fin has long filament extension</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Filament extension lacking from dorsal fin</td>
<td></td>
</tr>
<tr>
<td>5 (4)</td>
<td>Large dark spot on body near filament</td>
<td><em>C. ephippium</em></td>
</tr>
<tr>
<td></td>
<td>Small dark spot on body near filament</td>
<td><em>C. auriga</em></td>
</tr>
<tr>
<td>6 (4)</td>
<td>No vertical band through eye</td>
<td><em>C. fremblii</em></td>
</tr>
<tr>
<td></td>
<td>Vertical band through eye</td>
<td></td>
</tr>
<tr>
<td>7 (6)</td>
<td>Incomplete eyeband on face (does not go to top of head)</td>
<td><em>C. multicinctus</em></td>
</tr>
<tr>
<td></td>
<td>Complete eyeband on face (extends to top of head)</td>
<td></td>
</tr>
<tr>
<td>8 (7)</td>
<td>Nose area with band</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nose area lacks band</td>
<td></td>
</tr>
<tr>
<td>9 (8)</td>
<td>Fewer than eight diagonal bands on body</td>
<td><em>C. ornatissimus</em></td>
</tr>
<tr>
<td></td>
<td>More than eight diagonal bands on body</td>
<td><em>C. trifasciatus</em></td>
</tr>
<tr>
<td>10 (8)</td>
<td>Distinct white spot splits eyeband above eye</td>
<td><em>C. lineolatus</em></td>
</tr>
<tr>
<td></td>
<td>No white spot above eye; eyeband not split</td>
<td></td>
</tr>
<tr>
<td>11 (10)</td>
<td>Upper third of body under dorsal fin dark</td>
<td><em>C. tinkeri</em></td>
</tr>
<tr>
<td></td>
<td>Upper third of body under dorsal fin not dark</td>
<td></td>
</tr>
<tr>
<td>12 (11)</td>
<td>Distinct small spots arranged in rows</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No distinct small spots; body has large spot or band</td>
<td></td>
</tr>
<tr>
<td>13 (12)</td>
<td>No black band on caudal fin</td>
<td><em>C. citrinellus</em></td>
</tr>
<tr>
<td></td>
<td>Obvious black band on caudal peduncle</td>
<td><em>C. miliaris</em></td>
</tr>
<tr>
<td>14 (12)</td>
<td>Side with a large black teardrop; no dark bars on tail</td>
<td><em>C. unimaculatus</em></td>
</tr>
<tr>
<td></td>
<td>Large black shoulder patch; tail with dark bars</td>
<td><em>C. lunula</em></td>
</tr>
</tbody>
</table>