## Success criteria

The student assessor should tick the appropriate box for each criterion and then fill in the examples section below the table.

| Criteria | Completely <br> met | Partly met | Not met |
| :--- | :--- | :--- | :--- |
| Explains that the shape of the active site matches the <br> shape of substrate molecule |  |  |  |
| Explains that molecules with a different shape will not <br> fit the active site and so will not bind to the enzyme |  |  |  |
| Explains that the shape of the active site is part of the <br> tertiary structure of the enzyme |  |  |  |
| Explains that the tertiary structure is held in place by <br> weak bonds between R-groups of amino acids |  |  |  |
| Explains that the shape of the active site depends on <br> sequence of amino acids making up the <br> primary structure of the enzyme |  |  |  |
| Explains that the weak bonds include <br> instantaneous dipole - induced dipole attractions, <br> hydrogen bonds and ionic interactions |  |  |  |
| Explains that the substrate molecule binds to the <br> active site using weak bonds which are easily broken <br> to allow products to leave |  |  |  |
| Explains that heating causes bonds holding the <br> tertiary structure together to vibrate vigorously and <br> break resulting in a change of shape of the active site |  |  |  |
| Explains that changing the pH disrupts the ionic <br> interactions holding the tertiary structure together <br> resulting in a change of shape of the active site |  |  |  |
| Uses scientific words correctly |  |  |  |
| Explains ideas clearly |  |  |  |
| Diagrams help explain ideas |  |  |  |

Name of assessor $\qquad$

Student assessor examples of what is good about this account

Student assessor suggestions of what has been missed out or how it could be improved

How I could improve my account

