Year 12 Science: Zonation on a rocky shore: investigating a community pattern

Name: _____ Date: _____

Try these without your notes first, then check the answer key.

Practice

1. Three transects gave 3, 6 and 3 lined whelks in their Q5 quadrats. Find the mean per quadrat.

2. Turn that mean into a density per m², using 0.25 m² quadrats.

3. Using the class's table, describe where Neptune's necklace is found and where it is most abundant.

4. What kind of factor most likely sets the lower limit of the barnacle band?

5. Periwinkles crowd into crevices at low tide. Is that a structural, behavioural or physiological adaptation?

6. Write an Achieved sentence describing the periwinkle pattern, quoting data.

7. Give one reason, using an adaptation, why periwinkles can live at Q1 where barnacles cannot.

8. Lined whelks were absent from Q1 to Q3. Explain why, for a Merit answer.

Fix the mistake

9. Correct this statement: "The barnacles live in the mid shore because they like it there."

10. Correct this statement: "Periwinkles have adapted to the high shore so they can survive there."

11. Correct this statement: "There were 42 periwinkles at Q1, so the density is 42 per m²."

12. Correct this statement: "I chose where to put my transect so it went through the best rock pools."