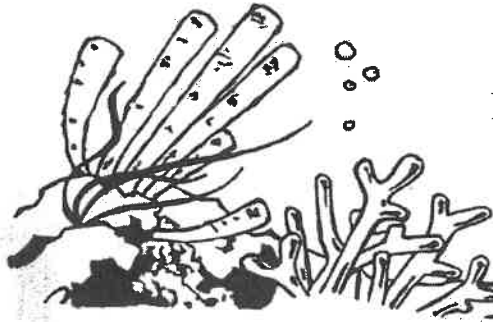
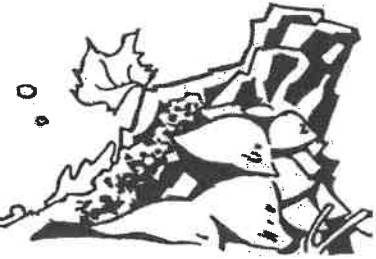


SPECIAL ATMOSPHERIC AND GEOLOGIC REPORT



HABITAT: SHELL REEF



Event: An almost imperceptible wiggle in the rotation of Aquaterra has caused a shift in wind patterns along the surface of the planet. Because wind patterns affect ocean currents, there has been a dramatic change in the Shell Reef area of Aquaterra. Large currents of extremely cold water are moving into the area from the Polar Seas and stalling there. The result is a drastic drop in water temperature. Many of the species living in the Shell Reef area can not handle the change. Furthermore, the shells that make up the reefs are becoming brittle and crumbling in the cold temperatures. The habitat of your species has changed completely.

Will the slight modifications made to your species enable it to survive the change? Explain.

In which of the other habitats of Aquaterra might your modified species now be adapted to live? (Assume no other changes have happened on the planet). List at least one habitat and explain which features might give your species a survival advantage in its new home.

Extra Credit: Using any form of the words "mutation", "adaptation", and/or "genetic variation" explain what has happened to your species.

SPECIAL ATMOSPHERIC AND GEOLOGIC REPORT



HABITAT: POLAR SEAS

Event: Changes in Aquaterra's atmosphere have affected the overall temperature of the planet! Gasses have formed a blanket over the planet trapping heat from the sun close to the surface. The average daily temperature of the planet has increased by 4°C overall. Perhaps the most dramatically affected areas are the Polar Seas. The water temperature at the poles has doubled, melting the surface ice, killing the microscopic marine life and changing the currents in the area. The habitat of your species has changed completely.

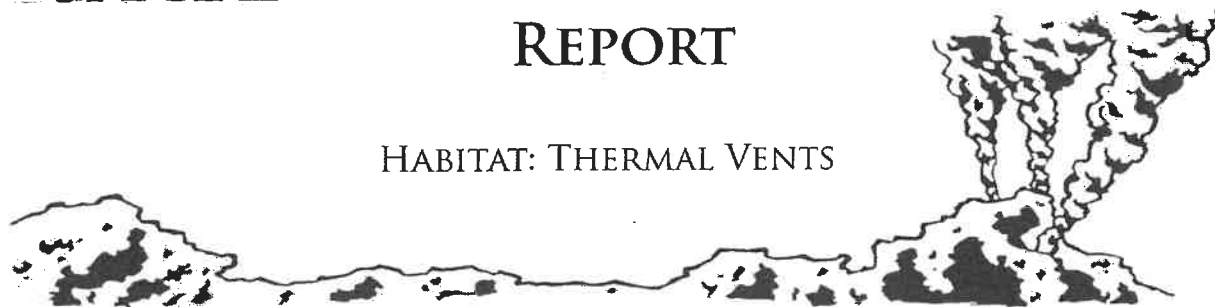
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Extra Credit: Using any form of the words "mutation", "adaptation", and/or "genetic variation" explain what has happened to your species.

SPECIAL ATMOSPHERIC AND GEOLOGIC REPORT

HABITAT: THERMAL VENTS



Event: The Thermal Vents have erupted! Increased geologic activity has pushed magma through the thermal vents. The oozing magma has covered a large area of the ocean floor and cooled to form a cap over the vents. This has resulted in a large drop in water temperature, a slight change in the chemical composition of the water, and a general calming of the turbulent waters near the area. The habitat of your species has changed completely.

Will the slight modifications made to your species enable it to survive the change? Explain.

In which of the other habitats of Aquaterra might your modified species now be adapted to live? (Assume no other changes have happened on the planet). List at least one habitat and explain which features might give your species a survival advantage in its new home.

Extra Credit: Using any form of the words "mutation", "adaptation", and/or "genetic variation" explain what has happened to your species.

SPECIAL ATMOSPHERIC AND GEOLOGIC REPORT



Event: Geologic activity has dramatically uplifted the continent on Aquaterra by roughly 305 meters! The Rocky Shore and large underwater forests are no longer submerged and have moved inward toward the middle of the continent. The habitat of your species has changed completely.

Will the slight modifications made to your species enable it to survive the change? Explain.

In which of the other habitats of Aquaterra might your modified species now be adapted to live? (Assume no other changes have happened on the planet). List at least one habitat and explain which features might give your species a survival advantage in its new home.

Extra Credit: Using any form of the words "mutation", "adaptation", and/or "genetic variation" explain what has happened to your species.