NATIONAL STONE CENTRE: KS4 EXERCISES AT LOCATIONS 3, 4 & 5

PUPIL WORKSHEET 1.

DESCRIPTION OF A MODERN REEF

Use the information in this section below to help you interpret the evidence in the rocks that you see during this visit

A SECTION ACROSS A MODERN REEF

The back reef is often a shallow "lagoon". The sediments are calcite shells & finer grained calcite muds. Sheltered by the reef, wave action is more gentle than the fore reef. Some shells of dead animals may be washed around and broken up.

Reef, with flat top at sea level, built of calcite skeletons of living animals like corals. Deep sea area where wind & waves bring oxygenated water & food for reef-building animals Waves also erode lumps off the reef during storms

Horizontal (or gently dipping beds on the reef-edge) form in the backreef "lagoon" area

Reef, building up from the sea floor becomes eroded by wave action on the seaward side Broken lumps of reef form a steeply dipping underwater "scree slope" in the fore reef area.

LOCATION 1.

Description of the rock:

Sketch of fossils (including a scale):

Conclusions

LOCATION 2.

Description of North East Quarry:

In which part of the reef do you think these rocks were formed? REEF, FORE-REEF, BACK-REEF? (Underline your answer). Give your reasons for your last answer.