

3. At the reef quarry. (From 20 to 30 minutes)

☛ Bring the group to the east (back) edge of the Reef Quarry. This is site 3 in **Figure 1 (NSC7 KS3 EX1)**. By looking over the wire fence many crinoid fossils can be observed. Point out that limestones can be different because of the number and kind of fossils they contain, and this varies from place to place. You may want to extend time here and take the opportunity, by using the same questions, to see how much of the work from the first exposure pupils can use to understand this one.

<p><b>“How many differences can you see in the limestone here compared with the first place we looked?”</b></p>	<p>[The bed dips to the north here, it is has very many fossils in it, mainly all the same.]</p>
<p><b>“Can you describe these fossils?”</b></p>	<p>[The crinoid remains here are almost all lengths of crinoid stem, but some may be arms, and possibly holdfast – finding them can depend on the light conditions. The stems are made up of individual circular calcite “discs” with a central “hole” rather like polo mints. Very few cups seem to be present]</p>
<p><b>“Why do you think so many crinoids were able to live here together?”</b></p>	<p>[Plenty of food, appropriate depth, oxygen, sunlight, salinity, temperature, and current strengths not strong enough to uproot them or sediment to bury them. Lack of predators, steady rise in sea level allowing the reef to build up. (See document <b>NSC8 Info reefs</b> for more detailed information)]</p>

Use **Worksheet 3** to help you make a sketch of one or two fossils from part of the exposure.