Geological time

Coins and fossils

Andrew Bell:

Got some coins here, and I'm going to give you a history lesson of Britain in the last two thousand years. Okay off we go. First one is a Roman coin, I can see Caesar's head here. Second one George III, third one's got Queen Victoria and the date is 1900 it's a penny, fourth one's a half-crown, comes from George V, another half-crown dated 1948 and last 10 pence from Queen Elizabeth's reign 1990. So that's it then, that's history of Britain in the last two thousand years. Now you and I know that there's an awful lot missing there. There's nothing about Alfred and the cakes, there's nothing about the Fire of London, there's nothing about the First and Second World War and so one. But the great advantage of these coins in a succession like that is that each one is a very good indication of the time it was made, 1948 for example, a very clear indication. Just because you've got some bit's of the record, it doesn't mean you've got the complete record.

Now here's Nature's coinage -they're fossils. I can see fossil colonies, I can see the spiral shell of a snail and here a coral. These collections of fossils called assemblages, are important because they characterise rocks. Now life on earth has evolved much as coinage evolves over time, so I can use these particular fossils taken together to tell me what age this rock is. The fossils represent Carboniferous times, so these limestones must be Carboniferous limestones.