Question/Activity	Likely response	Rationale
When teaching about the Earth we often use practical activities to explore Earth processes. Here we are going to demonstrate the length of geological time and the main stages in the development of life.		
What is this?	A toilet roll and a sheet of labels	Concrete preparation
I'm going to use the toilet roll to represent the length of geological time, from the origin of the Earth to the present day. The Earth formed 4567 million years ago, i.e. roughly 4600 million years ago, If I use one sheet of the toilet roll to represent 100 million years, how many sheets will I need to represent 4,600 million years?	46 sheets	
The cards show the main events in the development of life on Earth and the date at which they happened. (Note that you will see different versions of these dates in different books. As more evidence is found, the dates get adjusted). I'm going to cut up the cards and place them on the matching time lines on the toilet roll. If you have access to the cards you can do this in 2 ways: either read off the date and lay the card down at the right marker, OR hide the date and try suggesting what the date might be for each event, before you place the cards on the toilet roll.	Lay out the roll in the garden and place the cards down on the correct time line, before filming. Then walk to length giving a brief comment at some of the cards.	Understanding the duration of geological time and the timing of key events requires the development of skills of thinking in the time dimension.
What do you notice about the distribution of these significant events in the Earth's history? (See photo of a folded version of the toilet roll time line <i>Photo: Chris King</i>)	There seem to be very long periods with apparently very little change. Most of the significant events have occurred in the last 600 million years or so.	As above