Reach Out Science Curriculum - Rationale

At the heart of our science curriculum is the desire to build a secure knowledge of the world around us. We do this by systematically building up the students' schema of knowledge about natural phenomena and their investigation. In doing so, we believe our students will be able to use a strong knowledge foundation to pursue an area of the world in which their curiosity may take them and have the tools to meaningfully make progress in this pursuit. As a result, when we took the following steps in creating this curriculum: - first and foremost, we used the national curriculum to ensure we covered the core basics. However, we have carefully sequenced these topics such that they build well one after another at spaced intervals to enable greater retention. As a result in places the sequence does not follow the National Curriculum but has been designed to be age and stage appropriate. - where it enabled a greater understanding of the topic, the booklets move beyond the national curriculum. - the terms are roughly split into biology, chemistry and physics topics to begin to set them up for an understanding of those parts of science in secondary school. - practical investigation skills (How Science Works) are interwoven into the content and are often built into the climax of each topic to enable students to apply the knowledge they have just gained. This also means that the core structure of a science investigation is repeated and reinforced throughout the Key Stage. As with any curriculum, this is a work in progress that we are looking forward to implementing and reflecting on throughout its use so we will welcome any feedback as we publish the individual units.