

THE BRITISH SCHOOL OF NANJING A NORD ANGLIA EDUCATION SCHOOL

Science Curriculum Overview

Key Stage 3- Year 6

<u> Term 1 - Basic Skills</u>

Students are introduced to various skills needed to access the curriculum at a practical level and to facilitate the smooth transition from Year 5 into Year 6. A special booklet has been specially created for this and includes:

- laboratory rules and safety,
- hazard symbols,
- laboratory apparatus including Bunsen burners,
- units of measurement,
- graphing,
- data interpretation and evaluation,
- report writing,
- calculating percentages,
- drawing pie charges and
- using formulae.

Term 2 - One unit each of Biology, Chemistry, and Physics

In the first unit students learn about micro-organisms in terms of their ability to cause diseases and their uses. The second unit extends pupils' knowledge of evaporation and dissolving by considering purity, how easily things dissolve and how much of them can be dissolved. The final unit teaches pupils about the effects of balanced and unbalanced forces and consolidates earlier work on forces by asking pupils to apply their knowledge to different situations.

Term 3 - One unit each of Biology, Chemistry, and Physics

The first unit extends pupils' knowledge of how animals and plants rely on each other for survival and how some organisms are suited to the environments in which they live. In the second unit students revise and bring together ideas about changes of state and separating mixtures and introduces the idea of irreversible changes such as burning. In the final unit students learn how to construct electrical circuits using different components. This is then extended to how to draw them using the appropriate circuit symbols.

Practical Work

Throughout the 3 terms, all KS3 students' carryout activities from Thinking Science which is a comprehensive resource, containing all the materials of the highly acclaimed CASE project. CASE is an 'intervention programme' designed to accelerate cognitive development. Recurring patterns such as variables, classification, proportionality, probability, combinations, and correlation are introduced throughout the various activities.