

Business case for the purchase of:   
Smart Science Series for Key Stage 3

Cost: **From £1,349 for 100 copies of the 364-page Student’s Book and ALL teacher’s resources.**

This document was drafted following the release of ***Effective Buying for your School,*** the advice from the Department for Education, March 2014 which is non-statutory, andwas produced to provide guidance to schools about buying practices and how toachieve better value for money.

The need:  **A solid grounding in Science at Key Stage 3 is critical for GCSE Science success. Students need to learn and understand key scientific concepts and, crucially, to practise GCSE-style assessment with Key Stage 3 content to maximise their potential at Key Stage 4. The staff need to ensure rigorous coverage and assessment of the new 2014 Programme of Study for Science. The Science faculty needs resources that are flexible enough to allow schemes of work to be customised for a 2-year, 2 ½-year or 3-year Key Stage 3, and adapted for the school’s assessment criteria whilst showing progress by pupil in every lesson and across Key Stage 3**.

A new series for Key Stage 3 Science is required to benefit:

* Our school– to track and improve pupil progress, building right from the start of Year 7 for GCSE success.
* Our students– to secure real improvement in students’ scientific knowledge and understanding in Key Stage 3 that will allow them to develop and succeed at GCSE.
* Our staff– to enable all teachers, whatever their scientific specialism, to deliver Key Stage 3 lessons which follow a customised scheme of work, that delivers robust and engaging lessons with assessment opportunities, well-planned practicals and investigations and a comprehensive programme of support in developing literacy skills to deliver effective answers to six-mark/QWC, which are so critical for GCSE Science success.

The solution:

**Smart Learning has developed a rigorous, customisable and affordably priced series to deliver the new Programme of Study in 2 – 3 years.** Smart Science comprises step-by-stepfully editable Teacher’s Handbooks, Structured Questions, Practicals and Investigations with avibrant and engaging 364 page Student’s Book detailing all the content needed for Key Stage3. The series is supported by an app based eBook version of the Student’s Book, which canbe used on smartphones and tablets as well as on PCs and laptops (great for homework andrevision) or on the IWB in the classroom.

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| Resource title: | **Smart Science** Working Scientifically at Key Stage 3 |
| Format, dimensions and extent: | **Student’s Book** Paperback book/295mm (height) x 185mm (width)/364pp  eBook app-based version for smartphone, tablet (iOS or Android), laptop, PC, Mac and IWB  **Teacher’s Handbooks x 3** Paperback book and CD-ROM/A4/286pp |
| Publisher and publication date: | **Smart Learning Ltd, March 2014** |

Smart Science

Gives teachers the opportunity to customise an ‘off-the-shelf’ scheme of work for a 2-year or a 3-year Key Stage 3 with a rigorous assessment model (with and without Levels) that allows teachers to easily monitor pupil progress in every lesson. Supports students with a dynamic printed textbook and app-based eBook version, which contain EVERYTHING they need to know and master at Key Stage 3.

The challenge

The faculty needs a coherent approach to the new Key Stage 3 Programme of Study and an assessment model that works with and without Levels. For the school team to develop its own such scheme of work and extensive resources (that ALL use the same assessment model and fit the new curriculum) would be time-consuming and costly.

Areas for potential savings:

The RRP is £15.99 per copy, but until 25 July 2015 there is a UK schools special price of £9.99 per copy for 100+ copies, along with Special Offer Packs which combine these affordable Student’s Book prices with discounted Teacher’s Handbooks.

The additional/alternative eBook app-based version of the Student’s Book can be accessed for just £1.00 per student when purchased with a Special Offer Pack.

Additional information: Smart Science

**Overview of the Smart Science Student’s Book**The Smart Science Student’s Book provides 364-pages of colourful, easy-to-navigate content, packed with stunning images and clear scientific illustrations. Written for the new 2014 Science curriculum, the content covers all of Key Stage 3, in one student-friendly resource.

Used in conjunction with the Smart Science Teacher’s Handbooks and CD-ROMs, this resource provides everything you need to deliver a 2 or 3 year Key Stage 3.

**Each unit in the Smart Science Student's Book contains:**

* Prior knowledge
* Learning objectives
* Key words (linked to glossary and literacy activities)
* Opportunities for working scientifically, including handling data
* Thinking beyond – extension opportunities
* A variety of questions
* End of unit summary

**Key features and benefits of the Smart Science Teacher’s Handbooks**

The *Smart Science Teacher’s Handbooks 1 and 2* provide flexible resources to support the delivery of a 2-year Key Stage 3.

Used in conjunction with the [*Smart Science Student’s Book*](http://www.smart-learning.co.uk/smart-science-student-s-book-new-curriculum.html), this Handbook provides everything needed to deliver effective, engaging science lessons.

Key features include the Smart Science Assessment Model. Mapped to Bloom’s taxonomy (2001), this new assessment model enables you to track progress with or without levels in every lesson, throughout Key Stage 3.

**The Handbooks include:**

* A printed version of all lesson plans, assessment and a CD-ROM with worksheets, practical and investigations and digital copies of all printed material to edit and customise.
* Resource map overview, matched to the Programme of Study
* Progress escalator template
* Mark book template – to make logging students’ results and progression easier
* Literacy, numeracy and working scientifically guidance
* Assessment sheets for self, peer and teacher  assessment - one per science, per term
* Term introductions – giving an overview of each term's work
* Lesson maps – giving invaluable support for every lesson
* Editable worksheets, with answers, to engage every student
* Editable resource sheets with Structured Questions,  supporting QWC and featuring GCSE command words (including marking guides for teachers and progress escalators)
* Editable worksheets for practicals and investigations, including:
  + Student instructions
  + Marking guides for teachers (with progress escalator)
* Answers to questions in Student’s Book
* End-of-year synoptic tests (editable) featuring:
  + 6-mark QWC questions
  + GCSE command words
* Literacy PowerPoints

**Teacher’s Handbook 3** focuses on skill development and is a consolidation of content covered in Teacher's Handbooks 1 and 2 (which cover ALL required content for the 2014 Key Stage 3 Programme of Study in two years). Teacher’s Handbook 3 comprises:

* Skill-based tasks are organised into FIVE units: **Thinking scientifically**; **Using investigative approaches**; **Working critically with evidence**; **Using maths in science**; **Communicating in science**, that could be used throughout Years 7
* All tasks focus on developing **Working Scientifically skills** in one particular area, while providing an opportunity to revise key ideas and apply knowledge in new contexts.

**For each Unit, Teacher’s Handbook 3 provides:**

* An introduction, with mapping to KS3 PoS and GCSE criteria, and general guidance on progression in that skill
* Nine tasks: 3 in a Biology context, 3 in a Chemistry context, 3 in a Physics context.
  + Each task consists of:
    - A task brief – for students
    - A task map – for teachers
    - An assessment sheet – for self, peer and teacher assessment using the three attainment bands
* Structured questions  (with marking guides)
* An end-of-unit test (with marking guide).
* A synoptic end-of-KS3 test provides an assessment opportunity for readiness for KS4.

To give **feedback, ideas or if you have any queries**, please do not hesitate to contact the team on **01423 206 200**, or via email [admin@smart-learning.co.uk](mailto:admin@smart-learning.co.uk).

**www.smart-learning.co.uk**