

## **Appendix 1: General background material about and for pupils with Special Educational Needs and Science**

The National Curriculum science for Key Stage pupils with SEN guidance [www.standards.dfes.gov.uk/keystage3/respub/sc\\_sen](http://www.standards.dfes.gov.uk/keystage3/respub/sc_sen) provides practical suggestions on planning, possible teaching activities, lesson objectives and learning outcomes for secondary pupils who make less than expected progress in science. This is mainly for pupils at mainly levels 1-3. Associated with this guidance are several charts to support planning and teaching

- Cells
- Interdependence
- Particles
- Forces
- Energy: electricity, light, sound and heating

[www.standards.dfes.gov.uk/keystage3/respub/sc\\_sen](http://www.standards.dfes.gov.uk/keystage3/respub/sc_sen) has two well resourced topics on

- Heating and cooling
- Resistance to movement

Organisations like the RNIB can give advice about specific special needs and information about how to adapt equipment.

[www.rnib.org.uk/xpedio/groups/public/documents/publicwebsite/public\\_cu19.txt](http://www.rnib.org.uk/xpedio/groups/public/documents/publicwebsite/public_cu19.txt)

DfES (2001) *SEN Code of Practice* and the accompanying SEN toolkit gives general advice about pupils with special educational needs, as does the inclusion principles outlined in National Curriculum documents which say that schools have the responsibility to provide a 'broad and balanced curriculum for all pupils.'

[http://www.nc.uk.net/general/general\\_inclusion.html](http://www.nc.uk.net/general/general_inclusion.html)

QCA (2001) *Guidelines for Planning, Teaching and Assessing the Curriculum for Pupils with Learning Difficulties*

Teacher Net gives details about different medical conditions such as anaphylaxis, asthma, diabetes etc. This can be found at

[www.teachernet.gov.uk/wholeschool/healthandsafety/medical/](http://www.teachernet.gov.uk/wholeschool/healthandsafety/medical/)

Books about science and SEN include:-

Brilliant Publications, 1 Church View, Sparrow Hall Farm, Edlesborough, Dunstable Beds LU6 2ES [www.brilliantpublications.co.uk/dazzl3.htm](http://www.brilliantpublications.co.uk/dazzl3.htm)

Investigations & Experimentation for Pupils with Special Needs by Elaine Golding and Alan Jones. From Alan Jones, 6 Cedarwood Close, Rogerstone, Newport, S Wales NP10 9JZ £10 including postage.

### **Research into special educational needs and science**

Trainees and tutors doing research into science and special educational needs can find

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<Background Material for SEN and Science> Authored by Tina Jarvis, University of Leicester accessed from [http://www.ase.org.uk/sci-tutors/professional\\_issues/professional\\_values/sen\\_and\\_science.php](http://www.ase.org.uk/sci-tutors/professional_issues/professional_values/sen_and_science.php) date created [Mar 2005] page <1> of <2>

- A very detailed bibliography by David Wilson at <http://www.tomwilson.com/david/InclusiveCurricula/scsenbiblio.doc>.
- Useful web links via ISSSEN web site [www.issen.org.uk/links.htm](http://www.issen.org.uk/links.htm)
- K. Postlethwaite (1993) Differentiated Science Teaching Buckingham: Open University Press

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