

# **National curriculum assessment 2008**

## **Key stage 2 science**

### **Standardisation commentaries**

#### **Paper B**

## KS2 Science Standardisation Commentaries

### Paper B, Question 1-The Earth, Moon and Sun

S01	1a	Credit worthy	See mark scheme
	1bi	Not credit worthy	No clear indication of Earth, Moon and Sun
	1bii	Not credit worthy	No clear indication of Earth, Moon and Sun
	1c	Not credit worthy	Too much shading
	1d	Credit worthy	See mark scheme

S02	1a	Not credit worthy	See mark scheme
	1bi	Credit worthy	See mark scheme – unambiguous indication
	1bii	Credit worthy	See mark scheme – unambiguous indication
	1c	Not credit worthy	No shading
	1d	Not credit worthy	No indication of spin

S03	1a	Credit worthy	See mark scheme
	1bi	Credit worthy	Two correct answers out of the three required
	1bii	Not credit worthy	Two correct answers out of the three required
	1c	Not credit worthy	Not enough shading
	1d	Not credit worthy	See mark scheme

S04	1a	Not credit worthy	No positive indication
	1bi	Credit worthy	See mark scheme
	1bii	Credit worthy	See mark scheme
	1c	Not credit worthy	See mark scheme
	1d	Not credit worthy	No indication of spin

S05	1a	Not credit worthy	See mark scheme
	1bi	Not credit worthy	See mark scheme
	1bii	Not credit worthy	See mark scheme
	1c	Not credit worthy	No shading
	1d	Not credit worthy	No indication of spin

### Paper B, Question 2- Penguins

S01	2a	Not credit worthy	See mark scheme
	2b	Not credit worthy	See mark scheme
	2ci	Credit worthy	See mark scheme
	2cii	Credit worthy	See mark scheme indication that fish is a consumer
	2d	Credit worthy	

S02	2a	Not credit worthy	See mark scheme
	2b	Credit worthy	See mark scheme
	2ci	Credit worthy	See mark scheme
	2cii	Not credit worthy	See mark scheme
	2d	Not credit worthy	See mark scheme – many animals have eyelids

S03	2a	Credit worthy	See mark scheme
	2b	Credit worthy	See mark scheme
	2ci	Not credit worthy	See mark scheme
	2cii	Not credit worthy	See mark scheme – no indication that plant is a producer
	2d	Not credit worthy	See mark scheme - incorrect explanation for the feature

S04	2a	Not credit worthy	See mark scheme – two answers given
	2b	Credit worthy	See mark scheme
	2ci	Credit worthy	See mark scheme
	2cii	Credit worthy	See mark scheme
	2d	Credit worthy	See mark scheme

S05	2a	Credit worthy	See mark scheme
	2b	Credit worthy	See mark scheme
	2ci	Credit worthy	See mark scheme
	2cii	Not credit worthy	Plants are biological producers – not the sun
	2d	Credit worthy	See mark scheme

### **Paper B, Question 3- Electricity**

S01	3a	Credit worthy	See mark scheme
	3b	Credit worthy	See mark scheme
	3c	Credit worthy	See mark scheme
	3di	Credit worthy	See mark scheme 'Y' and 'N' acceptable alternatives
	3dii	Credit worthy	See mark scheme 'Y' and 'N' acceptable alternatives
	3e	Credit worthy	'Y' and 'N' acceptable alternatives

S02	3a	Not credit worthy	See mark scheme
	3b	Credit worthy	See mark scheme
	3c	Credit worthy	See mark scheme
	3di	Credit worthy	See mark scheme 'Y' and 'N' acceptable alternatives
	3dii	Not credit worthy	See mark scheme 'Y' and 'N' acceptable alternatives
	3e	Not credit worthy	See mark scheme

S03	3a	Not credit worthy	See mark scheme
	3b	Not credit worthy	See mark scheme
	3c	Not credit worthy	See mark scheme 'it' is ambiguous
	3di	Credit worthy	See mark scheme
	3dii	Not credit worthy	See mark scheme
	3e	Credit worthy	See mark scheme

S04	3a	Not credit worthy	See mark scheme – wrong scientific word
	3b	Credit worthy	See mark scheme – equivalent to a power pack
	3c	Not credit worthy	See mark scheme
	3di	Credit worthy	See mark scheme
	3dii	Credit worthy	See mark scheme
	3e	Credit worthy	See mark scheme

S05	3a	Credit worthy	See mark scheme
	3b	Not credit worthy	See mark scheme
	3c	Not credit worthy	See mark scheme – 'it' is ambiguous
	3di	Credit worthy	See mark scheme – ticks and crosses are acceptable alternatives

	3dii	Credit worthy	See mark scheme – ticks and crosses are acceptable alternatives
	3e	Credit worthy	See mark scheme

### **Paper B, Question 4- Hot Drinks**

S01	4a	Not credit worthy	Incorrect box ticked
	4b	Not credit worthy	Incorrect order
	4c	Credit worthy	It only has one layer is insufficient but it does not negate the correct science ‘which is very thin’
	4di	Not credit worthy	Answer out of range
	4dii	Not credit worthy	See additional guidance column

S02	4a	Credit worthy	Positive indication of the correct answer even though the box is not ticked
	4b	Not credit worthy	Incorrect order
	4c	Credit worthy	See mark scheme
	4di	Not credit worthy	Correct answer has been crossed out and the remaining answer is outside the range
	4dii	Credit worthy	It refers to room temperature, normal is insufficient and therefore neutral

S03	4a	Credit worthy	Positive indication
	4b	Not credit worthy	Even if A and C are swapped around the answer is incorrect
	4c	Credit worthy	There is a comparison of thinness of the material which is credit worthy
	4di	Credit worthy	Within the range
	4dii	Credit worthy	See mark scheme

S04	4a	Not credit worthy	Ticks take precedence therefore the incorrect box is ticked
	4b	Credit worthy	See mark scheme
	4c	Not credit worthy	No reason given as to why it cooled the quickest i.e. thinness/insulation
	4di	Not credit worthy	Out of range
	4dii	Not credit worthy	No indication of room temperature or as cold as the room, normal is insufficient

S05	4a	Credit worthy	See mark scheme
	4b	Not credit worthy	D has not been referred to
	4c	Credit worthy	See allowable answers
	4di	Not credit worthy	120 is outside the range
	4dii	Credit worthy	See allowable answers

### **Paper B, Question 5-Flowering Plants**

S01	5a	Credit worthy	See mark scheme
	5b	Credit worthy	See mark scheme
	5c	Credit worthy	Acceptable spelling
	5d	Credit worthy	Positive indication of stamen
	5e	Not credit worthy	Insufficient response – see additional guidance

S02	5a	Not credit worthy	Stem has been repeated twice
	5b	Credit worthy	June has been * therefore a positive indication

	5c	Credit worthy	See mark scheme –indication of new plants
	5d	Not credit worthy	List multiple answers
	5e	Credit worthy	The answer refers to the fact that insects can land on the petals

S03	5a	Not credit worthy	No mention of roots
	5b	Not credit worthy	The correct answer has been crossed out and replaced by an incorrect answer
	5c	Not credit worthy	No explanation as to why bees need to be attracted
	5d	Not credit worthy	No positive indication of stamen
	5e	Credit worthy	See mark scheme

S04	5a	Credit worthy	See mark scheme
	5b	Credit worthy	June has been identified
	5c	Credit worthy	New plants are made is correct
	5d	Credit worthy	See mark scheme
	5e	Credit worthy	See mark scheme

S05	5a	Not credit worthy	Incorrect order
	5b	Not credit worthy	June and July both start with 'Ju' therefore it is an insufficient answer
	5c	Credit worthy	Credit worthy for reproduction
	5d	Not credit worthy	List both answers, the incorrect one negates the correct one
	5e	Not credit worthy	'A' is ticked therefore incorrect

### **Paper B, Question 6- School Pond**

S01	6ai	Credit worthy	Acceptable alternative to 'rain'
	6aii	Not credit worthy	See mark scheme
	6b	Not credit worthy	See mark scheme
	6c	Credit worthy	The line graph is within tolerances to be correct
	6d	Credit worthy	Ticks take precedence
	6e	Credit worthy	See mark scheme

S02	6ai	Credit worthy	See mark scheme
	6aii	Not credit worthy	Incorrect
	6b	Not credit worthy	Incorrect science
	6c	Credit worthy	The crosses drawn are within tolerances
	6d	Credit worthy	See mark scheme
	6e	Credit worthy	Cooling is insufficient and therefore does not negate correct science

S03	6ai	Not credit worthy	See mark scheme
	6aii	Not credit worthy	See mark scheme
	6b	Credit worthy	Spelling acceptable for 'evaporate'
	6c	Not credit worthy	The graph crosses the week 7 line more than half a cm away from the correct plot
	6d	Credit worthy	See mark scheme
	6e	Credit worthy	Spelling creditworthy for 'condense'

S04	6ai	Credit worthy	See mark scheme
	6aii	Credit worthy	Positive indication of 4
	6b	Not credit worthy	Incorrect science

	6c	Not credit worthy	Both points are plotted on the week 6 line
	6d	Credit worthy	See mark scheme
	6e	Not credit worthy	Incorrect science

S05	6ai	Credit worthy	See mark scheme
	6aii	Credit worthy	Four is crossed out but there is nothing else there so it is correct
	6b	Credit worthy	Vapourisation is an acceptable alternative to 'evaporation'
	6c	Not credit worthy	Point for week 6 is out of tolerance
	6d	Credit worthy	See mark scheme
	6e	Not credit worthy	Incorrect science

### **Paper B, Question 7- Shoes**

S01	7a	Credit worthy	See mark scheme
	7b	Credit worthy	See mark scheme – a valid factor which can be measured
	7c	Credit worthy	See mark scheme – a valid control factor
	7d	Credit worthy	See mark scheme – valid explanation in this context

S02	7a	Credit worthy	See mark scheme
	7b	Not credit worthy	See mark scheme – ambiguous, could refer to the outside of the shoe
	7c	Credit worthy	See mark scheme – a valid control factor
	7d	Credit worthy	See mark scheme – valid explanation in this context

S03	7a	Credit worthy	See mark scheme – valid alternative factor
	7b	Not credit worthy	See mark scheme – a question rather than an indication of the dependent variable
	7c	Credit worthy	See mark scheme – a valid factor which could be controlled
	7d	Credit worthy	See mark scheme – valid explanation in this context

S04	7a	Credit worthy	See mark scheme
	7b	Not credit worthy	See mark scheme – insufficient (given in the question), needs indication of how this factor could be measured or observed
	7c	Credit worthy	See mark scheme – valid control variable
	7d	Credit worthy	See mark scheme – valid explanation in this context

S05	7a	Not credit worthy	See mark scheme – insufficient – ambiguous as to which type of surface
	7b	Credit worthy	See mark scheme
	7c	Not credit worthy	See mark scheme – insufficient
	7d	Not credit worthy	See mark scheme – insufficient

### **Paper B, Question 8- Parachutes**

S01	8a	Credit worthy	See mark scheme
	8b	Not credit worthy	Change of variable from time taken to hardness of fall
	8c	Credit worthy	See mark scheme
	8d	Credit worthy	See mark scheme

S02	8a	Not credit worthy	Insufficient needs 'air'
	8b	Credit worthy	See mark scheme

	8c	Not credit worthy	See mark scheme
	8d	Not credit worthy	See mark scheme – insufficient no indication of wind dispersal

S03	8a	Not credit worthy	See mark scheme
	8b	Not credit worthy	Relationship of variable is incorrect
	8c	Credit worthy	See mark scheme – ticks take precedence over crosses
	8d	Not credit worthy	See mark scheme – insufficient no indication of mode of transport

S04	8a	Not credit worthy	See mark scheme – incorrect science
	8b	Not credit worthy	See mark scheme – change of variable to ‘easiest’
	8c	Not credit worthy	See mark scheme – needs a positive indication of correct answer
	8d	Credit worthy	See mark scheme

S05	8a	Credit worthy	See mark scheme – no other answer given by pupil so mark awarded
	8b	Credit worthy	See mark scheme
	8c	Not credit worthy	See mark scheme – list rule
	8d	Not credit worthy	See mark scheme - insufficient