



Nottinghamshire Special Schools

Science moderation portfolio

January 2009

Present	
*****	Children and Young People's Services
*****	Beech Hill School
*****	Ash Lea School
*****	Carlton Digby School
*****	Carlton Digby School
*****	Foxwood School

Evidence for Assessment

Date of task: <i>23rd June 2008</i>	Subject: <i>Science - Life processes</i>
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Background information of child: Name, age, year group, specific need
Setting/staffing: 1:1, small group, whole class <i>Small group</i>
Outline of task: including support given and objective if appropriate <i>As pupil physically explores the stages of the life cycle of a seed/plant, does she interact with surroundings e.g. touching the black paper, pushing through the paper, touching the water bottle to feel the heat</i>
Evidence: What did the child actually do/say? (Include paying attention and interest) <i>Pupil focused on light whilst covered in dark paper (brilliantly focused). When water was sprayed moved. Did not try to rip paper but moved to the side (to escape) from the pool. Smiled when free. Enjoyed pressing a switch to make the light shine on our lettuce</i>
Conclusion: What does this show? <u>Experience/response</u> /skill/attitude/concept/ knowledge <i>Pupil showed an awareness of her environment and how it changed</i>
Level given: <i>P4e</i>
Assessed by: <i>S Birkins</i> Date: <i>Jan 09</i>
Level given: <i>p4</i>
If level is different from above please comment overleaf
Moderated by: <i>(see cover sheet)</i> Date: <i>Jan 09</i>

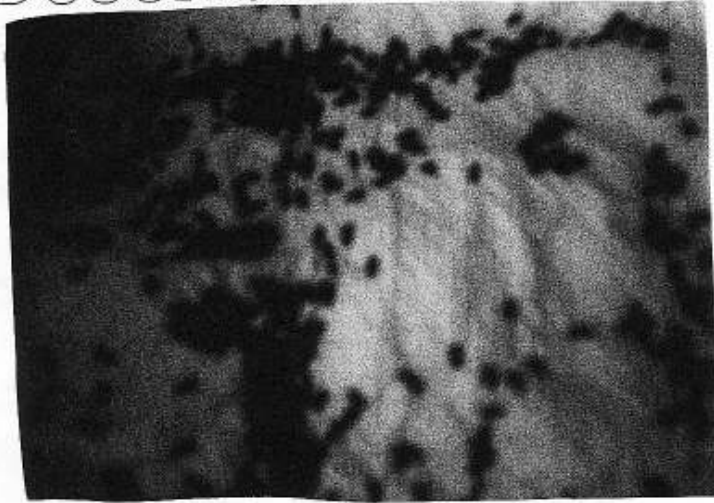
Level	Evidence
<p>P4 Pupils explore objects and materials provided, changing some materials by physical means and observing the outcomes, for example, when mixing flour and water. Pupils communicate their awareness of changes in light, sound or movement. They imitate actions involving main body parts, for example, clapping or stamping. They make sounds using their own bodies, for example, tapping, singing or vocalising, and imitate or copy sounds. They cause movement by a pushing or pulling action</p> <p><i>'Explore' includes access through any sensory mode. Teachers should ensure they are assessing intended, not accidental, actions.</i></p>	
<p>P5 Pupils take part in activities focused on the anticipation of and enquiry into specific environments, for example, finding a hamster under straw, or a CD or video in a pile. They match objects and materials in terms of single features or properties, for example, temperature or colour. They indicate the before and after of material changes. They try out a range of equipment in familiar and relevant situations, for example, initiating the activation of a range of light sources. They respond to simple scientific questions, for example, 'Show me the flower' 'Is this wet/dry?'</p> <p><i>'Showing', 'demonstrating' 'trying out' 'responding' etc may be done by any means appropriate to the pupil's preferred mode of communication and physical abilities. For some pupils this may mean directing an adult undertaking the task.</i></p>	No anticipation/enquiry/trialling

Evidence for Assessment

Date of task: <i>7th July 2008</i>	Subject: <i>Science - Life processes</i>
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Background information of child: Name, age, year group, specific need
Setting/staffing: 1:1, small group, whole class <i>Small group</i>
Outline of task: including support given and objective if appropriate <i>Show pupil dry seeds that had been left in the conservatory as part of a previous investigation. Ask pupil to choose some symbols and words to describe them.</i>
Evidence: What did the child actually do/say? (Include paying attention and interest) <i>Pupil showed a lot of interest in the seeds. When given options she said the seeds were dry and brown. Jodie chose from 8 symbols. Support given to read symbols</i>
Conclusion: What does this show? <u>Experience/response</u> /skill/attitude/concept/ knowledge <i>Pupil selected appropriate adjectives to describe characteristics</i>
Level given: <i>P8</i>
Assessed by: <i>S Birkins</i> Date: <i>Jan 09</i>
Level given: <i>p8</i>
If level is different from above please comment overleaf
Moderated by: <i>(see cover sheet)</i> Date: <i>Jan 09</i>

Describe the seeds



The seeds look...



brown



not healthy



small

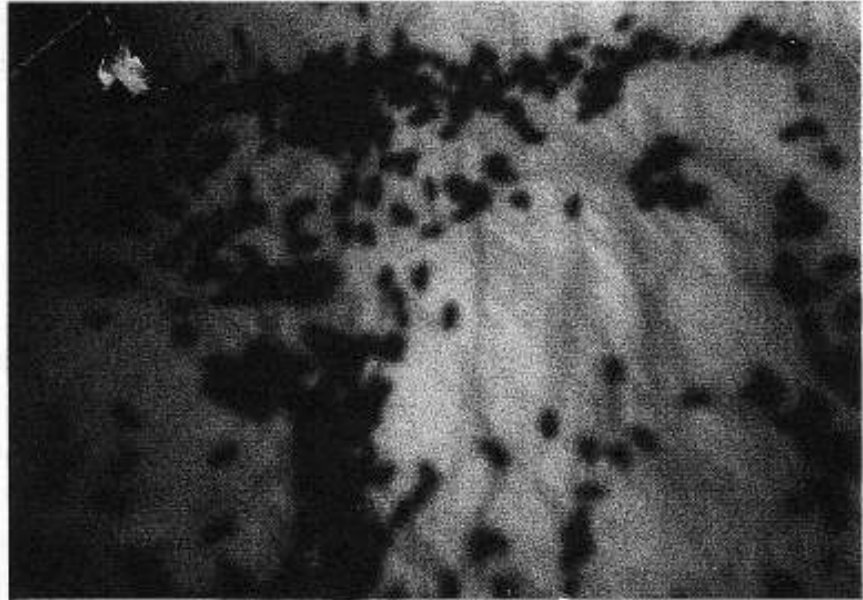
Level	Evidence
<p>P8 Pupils show they have observed patterns or regular changes in features of objects, living things and events, for example, chrysalis/butterfly day/night. They make some contribution to planning and evaluation and to recording their findings. They identify a range of common materials and know about some of their properties. They sort materials using simple criteria and communicate their observations of materials in terms of these properties. Pupils make their own observations of changes of light, sound or movement that result from actions, for example, using a volume control or a dimmer switch and can describe the changes when questioned directly.</p>	

Evidence for Assessment

Date of task: 7 th July 2008	Subject: <i>Science - Life processes</i>
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Background information of child: Name, age, year group, specific need	
Setting/staffing: 1:1, small group, whole class <i>Small group</i>	
Outline of task: including support given and objective if appropriate <i>Show pupil dry seeds that had been left in the conservatory as part of a previous investigation. Ask pupil to choose some symbols and words to describe them.</i>	
Evidence: What did the child actually do/say? (Include paying attention and interest) <i>Pupil used symbols to describe the seeds. She said they are brown. When given a choice about whether they were healthy or not she chose not healthy. Pupil was unsure about what wet and dry meant, and even though she touched the seeds she said they were wet. When asked after the explanation she said dry. We talked through the options to think about why they were dry. Out of 3 choices she said they have got no water.</i>	
Conclusion: What does this show? <u>Experience/response</u> /skill/attitude/concept/ knowledge <i>With prompts pupil could complete simple descriptions</i>	
Level given: <i>P7a</i>	
Assessed by: <i>S Birkins</i>	Date: <i>Jan 09</i>
Level given: <i>p8</i>	
If level is different from above please comment overleaf	
Moderated by: <i>(see cover sheet)</i>	Date: <i>Jan 09</i>

Describe what happened to the seeds



brown



not healthy



dry



no



water

Level	Evidence
<p>P8 Pupils show they have observed patterns or regular changes in features of objects, living things and events, for example, chrysalis/butterfly day/night. They make some contribution to planning and evaluation and to recording their findings. They identify a range of common materials and know about some of their properties. They sort materials using simple criteria and communicate their observations of materials in terms of these properties. Pupils make their own observations of changes of light, sound or movement that result from actions, for example, using a volume control or a dimmer switch and can describe the changes when questioned directly.</p>	

Evidence for Assessment

Date of task: <i>Nov 2008</i>	Subject: <i>Science</i>
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Background information of child: Name, age, year group, specific need <i>Boy Y10, age 14 with autism</i>
Setting/staffing: 1:1, small group, whole class <i>Whole class</i>
Outline of task: including support given and objective if appropriate <i>Fill in the blanks. Keyword provided and recognise/label the types of bird</i>
Evidence: What did the child actually do/say? (Include paying attention and interest) <i>Jim was given the first letter of the keyword. He completed the words. At the end of the lesson he could tell me that birds have feathers, lay eggs and have beaks</i>
Conclusion: What does this show? <u>Experience/response</u> /skill/attitude/concept/ knowledge <i>Jim can recognise and identify a chicken, pigeon and ostrich. He clicked on the slideshow to search for these birds</i>
Level given: <i>2b</i> <i>Pupils can describe their groups of animals or plants, e.g. say all of these are birds and these ones have fur</i> Assessed by: <i>K Malhotra</i> Date: <i>Jan 09</i>
Level given: <i>L2</i> If level is different from above please comment overleaf Moderated by: <i>(see cover sheet)</i> Date: <i>Jan 09</i>

Birds

Starter

Keywords : warm beak eggs backbone

Birds are vertebrates.

They have a backbone ✓

They are warm blooded. ✓

They have feathers ✓

They have beak ✓

They lay egg ✓

Can you name these birds? **Keywords : Chicken Ostrich Pigeon**



chicken ✓



Pigeon ✓



ostrich

Very neat

Independent

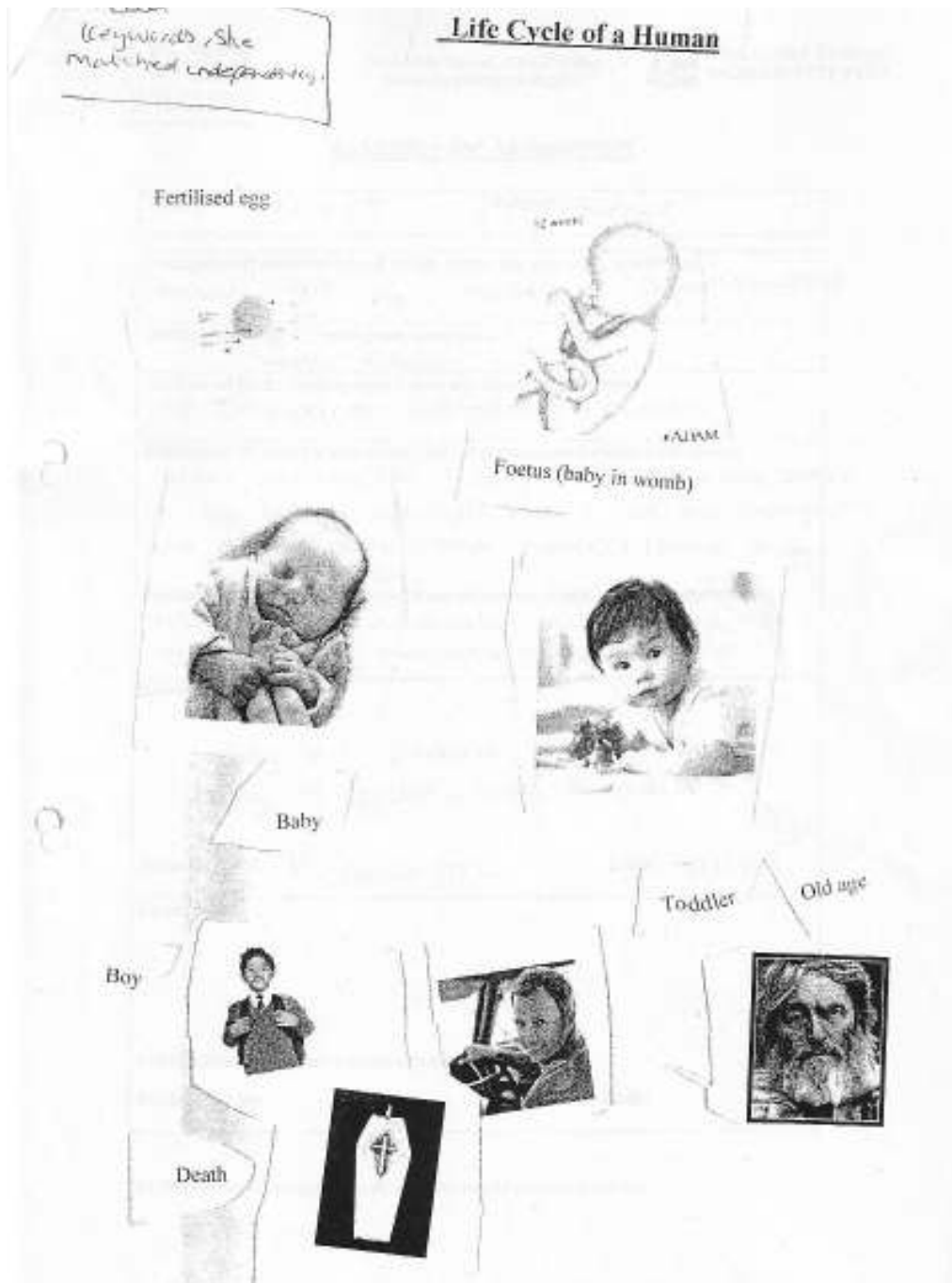
WAM

Level	Evidence
<p>Level 2 Pupils use their knowledge about living things to describe the basic conditions [for example, a supply of food, water, air, light] that animals and plants need in order to survive. They recognise that living things grow and reproduce. They sort living things into groups, using simple features. They describe the basis for their groupings [for example, number of legs, shape of leaf]. They recognise that different living things are found in different places [for example, ponds, woods].</p>	

Evidence for Assessment

Date of task: <i>Nov 2008</i>	Subject: <i>Science</i>
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Background information of child: Name, age, year group, specific need <i>Girl age 14. Y10 with Down's Syndrome</i>	
Setting/staffing: 1:1, small group, whole class <i>Small group</i>	
Outline of task: including support given and objective if appropriate <i>To complete the lifecycle of a human</i>	
Evidence: What did the child actually do/say? (Include paying attention and interest) <i>After watching the slideshow and discussing stages of the human life cycle, the pupil cut out photographs and cut keywords. Matched/paired them independently</i>	
Conclusion: What does this show? <u>Experience/response</u> /skill/attitude/concept/ knowledge <i>Visual learner, independently cut and posted the life cycle. She was motivated to keep on task</i>	
Level given: <i>2d</i>	
Assessed by: <i>K Malhotra</i>	Date: <i>Jan 09</i>
Level given: <i>L2</i>	
If level is different from above please comment overleaf	
Moderated by: <i>(see cover sheet)</i>	Date: <i>Jan 09</i>



Level	Evidence
<p>Level 2</p> <p>Pupils use their knowledge about living things to describe the basic conditions [for example, a supply of food, water, air, light] that animals and plants need in order to survive. They recognise that living things grow and reproduce. They sort living things into groups, using simple features. They describe the basis for their groupings [for example, number of legs, shape of leaf]. They recognise that different living things are found in different places [for example, ponds, woods].</p>	<p>From PIVATS "put pictures of a human being in order"</p>
<p>Level 3</p> <p>Pupils use their knowledge and understanding of basic life processes [for example, growth, reproduction] when they describe differences between living and non-living things. They provide simple explanations for changes in living things [for example, diet affecting the health of humans or other animals, lack of light or water altering plant growth]. They identify ways in which an animal is suited to its environment [for example, a fish having fins to help it swim].</p>	<p>Not got knowledge required for L3</p>

Evidence for Assessment

Date of task: <i>Autumn 2008</i>	Subject: <i>Science (genetics)</i>
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Background information of child: Name, age, year group, specific need <i>Y9 pupil, ADHD and poor literacy</i>
Setting/staffing: 1:1, small group, whole class <i>Independent work</i>
Outline of task: including support given and objective if appropriate <i>Intro to task - match the family members and look for similarities that could be inherited (cut and paste)</i>
Evidence: What did the child actually do/say? (Include paying attention and interest) <i>Pupil could match family members using his knowledge of the Simpsons. He could then look for similar features that could be inheritable</i> Conclusion: What does this show? <u>Experience/response</u> /skill/attitude/concept/ knowledge <i>Ability to compare/identify similarities - which could be passed down from parents</i>
Level given: <i>L3</i>
Assessed by: <i>R Butler</i> Date: <i>Jan 09</i>
Level given: <i>L2</i> Sorting activity only – see notes below If level is different from above please comment overleaf Moderated by: <i>(see cover sheet)</i> Date: <i>Jan 09</i>

The Simpsons



Characteristics the children had in common.

What features have been passed on by inheritance?

Independent work

Members of the family	What features were passed on?

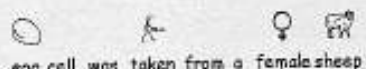
Level	Evidence
<p>Level 2 Pupils use their knowledge about living things to describe the basic conditions [for example, a supply of food, water, air, light] that animals and plants need in order to survive. They recognise that living things grow and reproduce. They sort living things into groups, using simple features. They describe the basis for their groupings [for example, number of legs, shape of leaf]. They recognise that different living things are found in different places [for example, ponds, woods].</p>	<p>Only demonstrates ability to sort in the evidence given</p>

Evidence for Assessment

Date of task: <i>Autumn 2008</i>	Subject: <i>Science (genetics)</i>
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Background information of child: Name, age, year group, specific need <i>Y9 pupil, ADHD and poor literacy</i>
Setting/staffing: 1:1, small group, whole class <i>Independent work</i>
Outline of task: including support given and objective if appropriate <i>Intro to task - match the family members and look for similarities that could be inherited (cut and paste)</i>
Evidence: What did the child actually do/say? (Include paying attention and interest) <i>Pupil was able to describe the steps of cloning, he could do this because he knew the role of DNA as an information carrier (following click and clone activity on PC). Ricky was also familiar with what a clone is and why we might want to clone.</i>
Conclusion: What does this show? <u>Experience/response</u> /skill/attitude/concept/ knowledge <i>Basic understanding of a clone as an identical genetic copy, and how to make one</i>
Level given: <i>L3</i>
Assessed by: <i>R Butler</i> Date: <i>Jan 09</i>
Level given: <i>L3</i>
If level is different from above please comment overleaf
Moderated by: <i>(see cover sheet)</i> Date: <i>Jan 09</i>

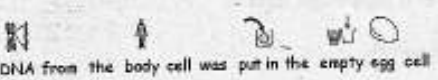
Reproductive

 An egg cell was taken from a female sheep 1

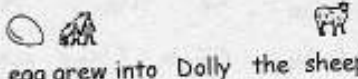
 The DNA was removed from the egg cell 2

 A body cell was taken from another sheep 3

 The DNA was taken out from the body cell 4

 DNA from the body cell was put in the empty egg cell 5

 The egg cell with new DNA was put back into the female sheep 6

 The egg grew into Dolly the sheep 7

Level	Evidence
<p>Level 3 Pupils use their knowledge and understanding of basic life processes [for example, growth, reproduction] when they describe differences between living and non-living things. They provide simple explanations for changes in living things [for example, diet affecting the health of humans or other animals, lack of light or water altering plant growth]. They identify ways in which an animal is suited to its environment [for example, a fish having fins to help it swim].</p>	<p>Couldn't demonstrate a level 4 in the task (apart from orally which isn't recorded). This is a sequencing activity</p>

Evidence for Assessment

Date of task: <i>Autumn 2008</i>	Subject: <i>Science (digestive system)</i>
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Background information of child: Name, age, year group, specific need <i>J. Y8, very little speech, enjoys science lessons</i>
Setting/staffing: 1:1, small group, whole class <i>Class of 7 with teacher and TA</i>
Outline of task: including support given and objective if appropriate <i>Students coloured own digestive system with given key. Limited support with cutting and sticking</i>
Evidence: What did the child actually do/say? (Include paying attention and interest) <i>Joshua was able to point to each organ of the digestive system and was able to make a sound similar to the name. He could point out any organ when asked, and also match organs to functions (e.g. which organ removes water)</i> Conclusion: What does this show? <u>Experience/response</u> /skill/attitude/concept/ knowledge <i>Knowledge of anatomy of digestive system and to role of each organ</i>
Level given: <i>L3</i> <i>Knowledge of organs + location</i>
Assessed by: <i>R Butler</i> Date: <i>Jan 09</i>
Level given: <i>L4</i> After considering pupil's knowledge of names, positions and functions of digestive organs If level is different from above please comment overleaf
Moderated by: <i>(see cover sheet)</i> Date: <i>Jan 09</i>



Level	Evidence
<p>Level 3 Pupils use their knowledge and understanding of basic life processes [for example, growth, reproduction] when they describe differences between living and non-living things. They provide simple explanations for changes in living things [for example, diet affecting the health of humans or other animals, lack of light or water altering plant growth]. They identify ways in which an animal is suited to its environment [for example, a fish having fins to help it swim].</p>	
<p>Level 4 (New version) Pupils describe some processes and phenomena related to organisms, their behaviour and the environment, drawing on scientific knowledge and understanding and using appropriate terminology, for example using food chains to describe feeding relationships between plants and animals in a habitat. They recognise that evidence can support or refute scientific ideas, such as in the identification and grouping of living things. They recognise some applications and implications of science, such as the use of predators to control pest populations.</p>	
<p>Level 4 (old version) Pupils demonstrate knowledge and understanding of life processes and living things drawn from the key stage 2 or key stage 3 programme of study. They use scientific names for some major organs of body systems [for example, the heart at key stage 2, the stomach at key stage 3] and identify the position of these organs in the human body. They identify organs [for example, stamen at key stage 2, stigma, root hairs at key stage 3] of different plants they observe. They use keys based on observable external features to help them to identify and group living things systematically. They recognise that feeding relationships exist between plants and animals in a habitat, and describe these relationships using food chains and terms [for example, predator and prey].</p>	<p>Pupil could (within the limitations of his SEN) describe the name, position and function of organs of the digestive system</p>