

# **Appendix A-Field notes**

## Lesson 1 - Floating and sinking

The start of the lesson had question time with questions such as what makes things float? How do things stay afloat? The following were the children who did not attempt any answers:

Lara and Tim.

Eve.

Harry.

### Evidence from video clips:

Teacher gave instructions to 1<sup>st</sup>/2<sup>nd</sup> class to predict whether their object would float or sink. Five children were present- Pseudonyms- Tara-8, Donal-8, John-7, Harry-7 and Jen-6. Concentrating on issues of participation this is how they reacted:

From the beginning Harry looks directly at Jen for guidance. John stands up to look at Jen's sheet then at Harry's sheet. Donal, Tara and Jen work independently. A few minutes into task and John still has not started. He asks everyone "Do you have to write?" Jen "Yes or draw" Throughout the task John and Harry are constantly looking at Jen. John states "I'm waiting for Mrs. Walker!" and throws his hands up in the air to show defeat. He then puts his head in his hands. Jen goes around to the boys' side of the table and explains what to do. John and Harry begin but are hampered by the spelling. John asks Donal to help but both girls go around and take over the spelling. Donal continues by himself very much on task.

The girls and John are eager to proceed to the next task and inquire when they can test. Donal and Harry although ready are quietly waiting. The children proceed to testing their predictions. Each one is interested and participating. They all observe the others' tests. As time proceeds the 2<sup>nd</sup> class pupils have taken on the roles of recording and 1<sup>st</sup> class are doing most of the testing. Jen gets more goes than anyone.

As the video was recording the above the teacher was circulating the Junior and Senior Infants groups and observing. Junior Infants- Six children were present at this group, three girls and three boys. Chris-4, Mags-4, Lara-4, Beth-5, Tony-5 and Tim-4. The following are some relevant observations:

In the beginning everyone was participating and engaged especially if the teacher was asking questions etc. Each child tested the predictions and all were involved. In the middle of the lesson the teacher asked "Why do you think that the plasticine sank?" At this time only Chris, Mags and Tony

were participating. Lara and Beth were playing with the plasticine while Tim was having a day dream. As the lesson was drawing to an end, with the task of trying to make plasticine float, Tim was completely off task. He was ripping up the paper covering the tables and lolling about on his chair totally uninterested. However all the other five children kept on trying new shapes as requested. They did approach the teacher a few times saying that it didn't float but they were willing to keep on trying.

Senior Infants- Five children were present, three girls and two boys. Kevin-6, Tom-6, Ellen-6, Eve-5 and May-5. From the onset Kevin tried to dominate the proceedings with Eve and Ellen becoming quieter and joining in less. In initial questioning the teacher only received answers from Kevin, Tom and May. This became the pattern with the two girls looking to the others for ideas and answers. In fact at one point Eve leaves her group and goes over to look at what is happening at Junior Infants. May and Kevin were easily the inspiration for the others with Kevin trying to tell everyone the *proper* way to do the tasks. May continued the tasks her own way and at one point had to prevent Kevin trying to dominate her in the test. She kept doing her own thing.

Teacher "Why do you think that the plasticine sank?" When this was asked to 1<sup>st</sup> and 2<sup>nd</sup> class each child had something to say except for Harry who had his hand up but when asked said he didn't know. When trying to make a boat they all begin enthusiastically. Donal makes a comment about having wood around a boat and Jen attaches a few pencils to make it float. The others follow suit immediately. When the teacher instructs them that there is a way to do it just using plasticine they all try their own thing again. Tara becomes frustrated after a few unsuccessful attempts and asks the teacher "Do you know how to do it?" in a nice way. To which the teacher replied "It's something to do with the shape of the plasticine" Tara immediately returns and tells Jen to stop making a boat. Jen continues with her own ideas and Tara becomes irritated then tries again.

Predictions-Junior Infants

Float

plasticine  
rubber  
matchstick

Sink

spoon  
coin  
crayon  
stone  
pencil

Predictions-Senior Infants

Float

coin  
spoon  
crayon  
pencil  
matchstick

Sink

stone  
plasticine  
rubber

Predictions-1<sup>st</sup> & 2<sup>nd</sup> class

Float

rubber  
pencil  
matchstick

Sink

coin  
spoon  
crayon  
stone  
plasticine

## Lesson 2 - Making shadows

We began with a question time with questions such as what are shadows? How are they made? The following are the children who made no attempt at any answers:

Lara.

Ellen.

Jen.

### Evidence from video clips:

Teacher gave instructions to Junior Infants, Senior Infants, 1<sup>st</sup> class and 2nd class groups to find their shadows and to make shadows. We did this outside and the children were instructed to keep to a certain area of the playground *i.e.* they were not allowed to go out of sight of the teacher or on to the steps. Concentrating on issues of participation and looking at the data in the following groupings, Junior Infants, Senior Infants and 1<sup>st</sup>/2<sup>nd</sup>, this is how they reacted:

In the 1<sup>st</sup>/2<sup>nd</sup> group seven children were present- Pseudonyms- Tara-8, Donal-8, Pat-7, John-7, Harry-7, Ann-7 and Jen-6.

Almost immediately Harry and Ann look unsure of what to do and look at Jen. Whilst John shouts, "Watch out for me!" He succeeds in drawing a lot of attention from the younger children. Harry then focuses his attention on John. John proceeds to command this. He lies on the ground in an attempt to produce a shadow. Instantaneously Harry and Pat follow suit. Not content with his friends' attention John needs mine also," Miss! Look how small mine is!" Tara and Jen are making crouching shadows Ann stands up observing what the other two are doing but makes no attempt to join in.

Junior Infants- Seven children were present at this group, three girls and four boys. Mags-4, Lara-4, Beth-5, Chris-4, Bob-4 Tony-5 and Tim-4.

Mags immediately follows a senior infant up some steps, an area where they were instructed not to go. She remains off task just running around. Tim is doing nothing and does not appear to understand the task. Beth is watching the antics of a senior infant and being instructed to lie down which she does. She is then observing John's demonstration along with Chris and Mags. They are all off task. While this is happening Bob tries to jump on various children and is not interested in the shadow task.

Senior Infants- Five children were present, three girls and two boys. Kevin-6, Jack-6, Ellen-6, Eve-5 and May-5.

Kevin begins by going up steps, an area that they were instructed to stay away from, and brings a junior infant with him. However he is trying to make shadows. After a few minutes he goes over to the three senior infant girls and Beth from junior infants and instructs them all to stretch out which they all do. Jack and Eve watch John's show and then Jack goes on task again while Eve annoys Pat by trying to poke him. When she is told to go away she tries to distract Harry which is more successful and they poke each other until Harry ends it. Eve remains off task and continues to try to distract the girls in her class.

Next each group was given a task the infants were to try to make animal shadows and 1<sup>st</sup>/2<sup>nd</sup> were to make numbers. Each group had a torch and an area to shine it on to. Junior infants- From the onset of the task Mags removed herself from the group saying, "I don't want a go". She sat down outside of the group. Just as soon as everyone has started having a go she wants back in saying, "They won't let me have a go". This is completely untrue. Tim tries to take Bob's go but Chris complains to the teacher saying, "Tim's taking Bob's go". Bob remains passive. The group is very eager to keep having their turns. So eager that Beth bashes Tony to ensure he knows when it is her go. Senior infants-They are focused and much more organized than junior infants. They start immediately and take turns in a circular fashion with no instruction from the teacher. Everyone proceeds fairly. 1<sup>st</sup>/2<sup>nd</sup>- After the teacher has explained to everyone what to do John's opening words are, "What are you all trying to make?" Jen isn't aware that it is her turn and so Tara pushes her. Jen is confused about what way to put her hands and again Tara instructs her on what to do and to "Go closer". The rest of the group are focused.

The children are now asked to pick something in the classroom that will make a shadow. Most children immediately go and try to find anything to use. Tim unsure of what to do and returns to his chair to look around. He doesn't get an object. Jack and Eve do not rush for an object rather they watch their peers and copy their objects. Eve again provides a distraction while Ellen tries to quieten her by saying, "Sssh!" At the 1<sup>st</sup>/2<sup>nd</sup> group all are on task. The girls are quiet and focused on the board whilst the boys are noisy but still doing the task.

Next the teacher questions the children asking them what shadows they made. Bob puts his hand up to answer but does not answer when

asked. The rest of the junior infants and all the other children participate with answers.

The infants are now given a worksheet asking them to draw what they think the shadow for a tree, a person and a dotted ball would look like. To begin with the juniors work independently however it is not long before Bob is looking at Chris' work and then plays with his sharpener instead of drawing. Tony joins in. Beth begins bickering with Mags instead of doing her work. Tim finishes his sheet very quickly and without much care then spends a lot of time tiding his pencils etc.

In the senior infants Kevin automatically tries to distract his entire group by singing and gesturing. All try to ignore him but he persists at May. She keeps ignoring him then tells him that he is annoying her. He retorts "Well you're annoying me" then leaves her alone. They all get back to work then Kevin annoys Jack by nearly sitting on top of him. He is constantly talking and questioning and eventually brings his sheet to the teacher when no attention is coming from his peers. He continues with this pattern until the end of the task. He is more interested in the video than the lesson.

1<sup>st</sup>/2<sup>nd</sup> class are given a worksheet with the following tasks (1) To show how they made a small shadow or a big shadow and (2) to explain how your shadow always touches you and to explain how to make a shadow. Each part is explained in detail. John puts up his hand and asks a question which has just been answered. John and Jen try to read the sheet and progress with it. Ann just writes her name while Harry looks at what John is doing. John is unsure of what to do so he asks Pat and then gets started. Ann observes this but still does not understand what to do and does not ask for help. Tara and Donal work independently. Harry looks stuck but he and John are still trying. Ann still has not started and is looking around. She tries to look at Jen's but still does not ask for help. John asks, "Does your shadow always stay near you? Sure it doesn't?" Donal answers, "Yes it does!" Harry questions John on what to do then proceeds. Ann remains static. Harry resorts to copying John. Tara, Donal and Jen are all working independently with Pat occasionally asking Donal things. Ann still has not started. She begins to draw after looking at others. Jen then tells her what she should be drawing. Ann rubs out what she had started and draws what Jen instructed. Then Jen hides her sheet from Ann to stop her from looking. Consequently Ann is stuck again. Harry rubs his sheet on his head still trying but lost. John instructs Harry on where the sun should be. Tara starts chatting and commands everyone's attention.

Pat tries vainly to distract Donal. The teacher then helps them complete the worksheet as John, Harry and Ann look very frustrated.

**Analysis of worksheets:**

✓ = attempted participation

✓ = correctly answered

X = no participation

Junior infants	Tree	Person	Ball
Mags	✓	✓	✓
Lara	✓	✓	✓
Beth	✓	✓	✓
Tony	✓	x	✓ unfinished
Chris	✓	✓	✓
Bob	✓	✓	✓ unfinished
Tim	✓	x	✓
Senior infants			
May	✓	✓	✓
Kevin	✓	✓	✓
Jack	✓	✓	✓
Ellen	✓	✓	✓
Eve	✓	✓	✓
1 <sup>st</sup> /2 <sup>nd</sup>	Section 1	Section 2	Section 3
Donal	✓	✓	✓
Tara	✓	✓	✓
Pat	✓	✓	✓
John	✓	✓	✓
Harry	✓	x	x
Ann	x	x	x
Jen	x	✓	✓



## Lesson 3 - Properties and characteristics of materials

We began the lesson with a question time with questions such as, what do you wear on rainy days? Why do we need rainwear? Why does this keep us dry? The following were the children who did not attempt any answers: Bob, Tim and Lara.  
Eve, Ellen, Tom and Jack.  
Ann and Harry.

### Evidence from video clips:

The teacher had previously placed a collection of different materials on each group's table. 1<sup>st</sup>/2<sup>nd</sup> were told they had to fairly test the materials to see which absorbs a lot a little or nothing. At the end they would sort them in order of absorbency. In the 1<sup>st</sup>/2<sup>nd</sup> group six children were present- Pseudonyms- Donal-8, Pat-7, John-7, Harry-7, Ann-7 and Jen-6.

The teacher asked how they could ensure the test was fair. Donal answered, "Because they're more wetter". Jen tries to answer but John talks over her stating, "Miss 'cos there's less water on the plate". He then grabs a cloth and says, "Soak up water! Easy!" and looks around to see if anyone is watching. (They are). Donal and John want to begin the task and jump to cut material into the same sizes. Ann tries to join in but chooses a material that is already the same size. Harry and Pat look uninterested. Harry says that he will take the first go then says, "No! Jen first then me." (In age order). When Donal finds the material hard to cut Jack instructs him to just rip it. He does so. Harry has appointed himself in charge of topping up the water. John objects but lets him proceed. John begins to show off but Harry tells him it is Jen's go. Jen checks her object and then Harry tries his. John grabs him and says, "No Harry! Teacher didn't say go. Miss they already started! Harry retorts, "Jen told me too" and she denies it. The teacher get them to start again. Jen states, "It didn't soak up any". Harry has a sponge and Jen tells him he needs more water in the plate. Donal instructs him to just take it out and get more water. He does so. Pat and Ann are both watching but making no effort to join in. Pat appears very tired and listless today. Harry gets the water and Donal tells him where to fill it to. John and Jen begin an argument over whether or not to take another go. John comes to ask the teacher and returns to tell Jen not to have another go, the opposite to what he has been told. (Jen doesn't listen anyway). When the water starts to run out John mentions getting some but Harry keeps his hand on his shoulder to prevent him

going for it. John keeps objecting that there is not enough water in the plate for his go until he has annoyed everyone by delaying the testing. John goes for water and Harry is angry. He comes and tells the teacher that John is taking too much water. Ann takes her go without fuss and delay. Donal says, "Mine soaked up a lot", John states, "Mine's the most!" Harry decides to put all the materials tested on the chairs for the infants' answers. He does so until Donal spots him and tells him that was for the infants. Jen retrieves them. They line them up in order of absorbency with everyone participating except for Ann.

### Teacher observation and video clips

Junior infants - Seven children were present at this group, three girls and four boys. Mags-4, Lara-4, Beth-5, Chris-4, Bob-4 Tony-5 and Tim-4. All are engaged immediately. The girls sit quietly looking at the objects and the water. The teacher instructs them to take turns. Bob begins saying, "It soaked". He allows Chris to take out his object. Chris and Tony are interested but Tim is very quiet. Beth gets more water and immediately Mags wants to as well. Bob advises everyone to feel their object to see if it has soaked up water. Tim remains detached from group not taking a turn and playing with anything he can.

Senior Infants- Six children were present, three girls and three boys. Kevin-6, Tom-6, Jack-6, Ellen-6, Eve-5 and May-5. All participate but Jack remains quiet throughout task. Eve and Kevin become quite disruptive by running around the table. Eve comes over to the teacher a few times for unimportant matters. Kevin and Tom mess whenever they are in close proximity and Kevin is circulating all the time. Eve tries to pull an object from Tom insisting that Ellen had it first. Meanwhile Ellen says she wants a different object so Eve leaves Tom alone. Eventually the teacher has to reprimand Eve as she is annoying her peers. When they have to place the objects on the correct chairs Kevin tries to instruct everyone where to place them.

Results from infants test:

Senior infants	Did soak up water	Did not soak up water
	paper	Card
	Newspaper	Plastic
	Cloth	Felt
	Sponge	tissue
		Plasticine(Kevin insisted this was wrong)
Junior infants	Newspaper	Plasticine
	Sponge	plastic
	Cloth	
	Paper	
	Card	
	Wool	
	Kitchen roll	

## Lesson 4- Pushing and pulling

The lesson began with question time. The children were asked to name an object in the classroom that could move. They were also asked what was used to make them move and why various things stop moving. Only one child made no response:

Ellen.

### Evidence from video clips:

In the 1<sup>st</sup>/2<sup>nd</sup> group six children were present- Pseudonyms- Donal-8, Pat-7, John-7, Tara-8, Ann-7 and Jen-6. They were first asked to think of things in the classroom that you could push or pull. They were also asked to list them. Jack immediately grabs the sheet and starts writing. He then puts it in the middle of the table. The others are all watching him. Ann says something to Tara to which Tara replies, “John won’t let me!” She is clearly miffed that John has taken control. John is the only child standing trying to command attention. The rest are awaiting further instructions. Jen asks, “Miss what have we to do? I wrote push and John wrote pull.” Tara and Pat began to mess but as soon as the teacher reiterates what is to be done they become engaged again. Donal, Jen and Ann are looking around the room finding suitable objects. Tara, John and Jen jump to their feet. Ann doesn’t move. Jen begins to list but John goes and brings an object over and says, “Miss push over there and pull over here?” The teacher explain just to list the objects. Jen says, “I’ll write the push!” John says, “I’ll write the pull!” Tara moves around beside the sheets. Donal also gets up to look. Ann and Pat make no effort to join in. Pat sits passively watching. When Jen is finished writing Donal takes the pencil from her. Tara comes to complain that John isn’t letting her have a go. Ann helps John. The teacher say not to hog the sheet. John then leaves the table announcing loudly, “I’m gonna go around and look.” As soon as John leaves gets up and comes around beside the sheet and writes an object. Ann makes no attempt to write. John brings over some objects to show. John gets the sheet back and asks Jen and Donal for spellings. Then he asks Tara but she is still cross with him and won’t answer directly. She makes him sound it out. Ann says, “Would we need to put some over there?” Pointing to an empty space on the sheet. She does not try to take the sheet. Donal brings it over beside him. John calls, “Miss I need sleigh and train.”(spelling) Jen retorts “Sleigh isn’t here!” The next task is to make a car go faster or slower when pushing or pulling. They all listen intently to the instructions. John, Pat and Jen jump to their feet and begin collecting their materials. Donal remains seated working away. Ann looks around at others but does not attempt to start her own

experiment. Tara removes herself from her table and works at my desk. John comes up to tell the teacher exactly what he is doing but she tells him to write it all down. “Right!” he says happily. Ann begins to copy Donal, who is sitting opposite her, but looks very unsure of what she is doing. John watches Jen’s test with interest but does not copy he is merely observing. Tara goes back to her table on the teacher’s request, looks around at others then begins. She tries to get the teacher’s attention a few times and eventually brings her experiment up to see what she thinks. All the while Pat and Donal have remained very independent and focused. They have barely moved from their seats. Jen and Tara are also focused but they are moving purposely around the room. Ann has begun bit without apparent direction. She comes to the teacher to ask for paper and felt, which is beside her, and tries an experiment. She comes back again to ask for a ramp rather than using her own idea. The teacher gives her some advice and she appears much happier. She immediately looks to be more content. Jen and Tara observe John’s test. He remains on task and keeps modifying his ramp. Ann gets into difficulties in getting her ramp to work. She comes to the teacher again for advice. She says, “I’m getting muddled.”

Written results from 1<sup>st</sup>/2<sup>nd</sup> tests of how to make a car go faster or slower:

	Fast	Slow
Donal	I can make fast by pulling on string.	The newspaper slows the car down.
Tara	I pushed the car down the ramp and it went fast.	I put down some material the car then went down the ramp and the material stopped the car.
Pat	My car goes fast by going down a ramp	My car goes slow with the string in the way.
Jen	The table made it go fast. The string made it go fast.	A book slowed it down. The m... (unfinished)
John	String, push.	Hand
Ann	(No attempt to fill it herself)	Teacher wrote, “The tissues stopped the car”. Ann wrote, “The table stopped the car”.

### Teacher observation and video clips

Junior infants - Seven children were present at this group, three girls and four boys. Mags-4, Lara-4, Beth-5, Chris-4, Bob-4 Tony-5 and Tim-4. The first task involves looking at pictures of objects and deciding whether you push or pull them. All the children are very eager to place their pictures on the right chairs. Tim is the only one who is unsure of where to put his. In the end Chris tells him where to put it. Next they have been given a worksheet and they have to colour the people who are pushing, blue and the people who are pulling, red. Six of the juniors are all doing their worksheet but Bob does not look focused. It is not long before he asks to go to the toilet. Tony gets distracted by the 1<sup>st</sup>/2<sup>nd</sup> class group and has to be told to do his own work. Lara gets confused about which colour to do each person and comes up a few times to check that she is doing it right. Chris comes to check that he has all his pushing bits coloured, rather than check through it himself. Bob comes to tell that Tony is doing them the wrong colour, which he is, and then ten seconds later comes to tell that Tim is also doing them the wrong colour. Beth comes to check that she is doing the right colour and Lara comes once more also. Bob has returned to his work but is now totally confused and comes up three times. Each time the teacher tells him the right colours but he still muddles them up. Mags and Beth are off task at times.

Senior Infants- Six children were present, three girls and three boys. Kevin-6, Tom-6, Jack-6, Ellen-6, Eve-5 and Sue-5. The first activity is to put the pictures with either push or pull (signs on chairs). While the teacher is describing what to do Kevin is sticking his hands out in front of Jack who does his best to ignore this. He then leans right over in his chair and is almost on top of Jack. He grabs Jack's pencils etc. and Jack looks very annoyed. When Kevin gets his picture he looks at Jack's before looking at his own. Eve, Jack and Kevin discuss pictures and pushing and pulling. Jack and Kevin get up to place their pictures on the chairs. Kevin knocks over the chair accidentally. The teacher tells them, again that they are supposed to be waiting. Kevin waits for a minute then drops his on the floor and begins creeping over to the chair again. When the teacher instructs the girls to put theirs on first he finally decides to wait properly. Eve goes and puts hers on straight away but Ellen and May are not listening. Eve tells them to do it and then makes sure that the boys are still waiting. During the boys turn Tom asks how to spell push. He is very focused on the task. Jack then checks which pull is. Kevin puts his on then tries to fix the pictures which he thinks are in the wrong places. Next they are given a worksheet and they have to colour the people who are pushing, blue and the people who are pulling, red. Eve is extremely

focused today and begins to get her colours right away. She shouts, “Miss I’m ready!” When the teacher does not respond she comes running up to check if she can give out the worksheets. She goes back and settles into the task. The rest of the children make a start except for Kevin who very quickly loses interest. His interest becomes focused on the 1<sup>st</sup>/2<sup>nd</sup> activity, especially Pat’s who is closest to him. He tries to join in with Pat who tells him, “Mind your own business”. He retreats to his own table but continues to stare at Pat and his experiment. Meanwhile Tom has lost concentration and comes over to Donal (2<sup>nd</sup> class). He grabs his car and Kevin comes over to join in. The teacher tells them to go back to their worksheets. Pat is getting annoyed that Kevin is staring so he tells the teacher. Kevin has nothing done on his own worksheet. He starts under the teacher’s instructions but manages to continue to look at John’s test a little while later. Tom has discovered the video and decides to look into it for a while. He tries to involve John but after a brief wave he gets back to his work. The girls, especially May and Ellen begin to talk and are slow at sheet.

Levels of participation in worksheet activity by infants:

Name:	Amount completed				
	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{3}{4}$	Completed	Comment:
<b>Junior infants</b>					
Beth				✓	Correctly answered
Lara			✓		Muddled at first
Mags		✓			Muddled at first
Chris				✓	Correct
Tim			✓		Incorrect
Bob	✓				Correct(Helped by teacher)
Tony				✓	Correct
<b>Senior infants</b>					
Ellen		✓			Correct
May	✓				Correct
Eve	✓				Some right some wrong
Kevin		✓			Correct but done in a few seconds. A line of the colour is scribbled on sheet.
Jack	✓				Incorrect
Tom				✓	Correct



## Lesson 5- Magnetism

The lesson began with question time. The children were asked, “What are magnets?” and, “Where can you find or use one?”

The following children made no responses

Bob and Tony

Eve, Tom and Jack

Ann

### Evidence from video clips and teacher observation:

In the 1<sup>st</sup>/2<sup>nd</sup> group six children were present- Pseudonyms- Donal-8, Pat-7, John-7, Tara-8, Ann-7 and Jen-6. The first task is for the children to try and get as many paperclips as they can attached to their magnet. They are divided into pairs. Donal and Tara work as a team. John does a running commentary whilst doing the task and Jen just gets on with it. Pat and Ann work together. They are then told to choose a magnet which they think is the strongest and write down a reason why and the same for the weakest. They all rush for the magnets save for Donal who calmly waits for Tara to pass him one. Donal and Tara then proceed to work together in the task. John takes on the role of tester while Jen takes control of the writing. She removes the paper from John’s reach and keeps it for the entire task. Ann watches Pat test the magnets. She then gets the paper and writes Strongest/weakest (from the blackboard). She writes nothing more. She lifts two magnets but does not do anything with them. She focuses her attention on Tara. Then Pat begins to write his results. Ann tries to communicate with him but he is engrossed in completing the task. She even bends right over beside him but he ignores her. He begins another test and Ann tries to use her magnet but he pushes her away and uses his own. Later he waves two magnets in the air just out of reach of Ann’s hands. Ann is the only one of the six sitting passively at any time.

Next the children have to devise a fishing game. There is a worksheet with the fish drawn on it and instructions. Tara and Jen grab a sheet each and immediately choose their fish. John, Donal and Pat all go for a magnet. Pat gives Ann a sheet and scissors (she is sitting beside the pot of scissors but makes no attempt to get a pair herself) Pat remembers he needs the scissors and takes them back from Ann. She says nothing but gets her own. She watches Tara for quite some time before beginning to cut. Jen begins to instruct John in what he should do. She tells him, “You can get...” He interrupts, “Two fish!” “No! I do cutting out you do the colouring in and then you can” He interrupts again with, “Fish!” “No. You do two and I do two!” John cuts the string and Jen advises, “I think

it's going to be too long!" He agrees, "Me too!" and cuts it. Donal and Tara have been working individually without dialogue but on task. John asks, "Tara do you want string?" She replies, "Do your own". Then she takes the string from John. John tries to fish holding the magnet in his hand and dangling the string. Pat has moved around beside John. The teacher says, "are you thinking about that the right way John?" Tara giggles hysterically and everyone looks up. He still does not understand so Pat reaches for it and tries to demonstrate but the teacher intervenes telling him to work it out himself. Eventually Jen shows him. Then she states, "You start colouring in!" He ignores her. Then, "You start colouring in!!" He replies, "Right I just need to tie this." He lifts a few things with the magnet and string and then he colours. Pat remains adrift from his partner and only returns when she hands him half of the sheet and he can cut out his fish. Donal and Tara go away from the table to play their game so that no-one will copy. When they come back John tries to tell Donal that he put on all the paperclips but Donal ignores him and completes the task. Pat tells me, "We're having a practise run!" Ann only has a go when Pat leaves the table. Pat comes up to ask how to put on the paperclip. He does not pass on this information to Ann. The teacher then asks them to demonstrate their game. Ann looks at Pat but he is too busy tidying so she tells the teacher what they did. However when she goes to fish her paperclips are not attached nor are Pat's. He puts his on and has a go. She follows suit. Jen gives a talk about their ideas for rules. John constantly chips in with more. They work as a team and great a great and equal demonstration. Tara does the talking in her group but they both take turns in the demonstration.

Results of task to find the strongest/weakest magnet:

Name	Strongest	Reason	Weakest	Reason
Tara	I think this magnet is the strongest.(pic. of grey magnet	None	I think the weakest is the yellow ball.	None.
Donal	Agreed with Tara. Did not write.	Participated in testing.		
Pat	The U shaped magnet.	Of it's colour and size.	The ball shaped magnet.	Of it's colour and size.
Ann	No writing or participation in testing.			
Jen	The black and white magnet.	We think it's the strongest.	The yellow round ball.	We think it's the weakest because it feels weak.
John	No writing but he tested all the magnets			

Evidence from video clips and teacher observation:

Junior infants - Seven children were present at this group, three girls and four boys. Mags-4, Lara-4, Beth-5, Chris-4, Bob-4 Tony-5 and Tim-4. The teacher pairs the children to do the first task (As 1<sup>st</sup>/2<sup>nd</sup>)

Bob and Tim do not understand what to do and Bob keeps putting paperclips all around the magnet, rather than in a line. He does not give Tim a chance. Eventually Tim says, "Bob! You're wasting time. My turn!" Lara, Beth and Mags decide to pass it in circles and take turns. Tony takes control while Chris just watches. After a while Mags tells the boys to put the magnet in the middle. Tony does so and Chris joins in. The next task is to take the paperclip for a walk along a road on their worksheet (holding the magnet on the sheet then under the sheet). They appear focused at first. Tim very quickly needs to go to the toilet and stays there a long time. The girls work away but chat to each other rather loudly. Chris is focused. The lesson continues through a break and he wants to continue. Tony is also but gets distracted by the 1<sup>st</sup>/2<sup>nd</sup> activity. Bob sits looking into space or at Eve working beside him. Tim comes

back but remains off task. By the end of the lesson the girls have fallen out with each other.

Senior Infants- Six children were present, three girls and three boys. Kevin-6, Tom-6, Jack-6, Ellen-6, Eve-5 and Sue-5. During the first task Eve and Kevin work very well together. Kevin spots Bob doing the task wrongly and tells him he didn't do it right. At first Tom keeps the task to himself but then May insists he must share. They work for a while but May comes up complaining, "Tom is annoying me snatching!" Ellen takes control over the task. Jack gets frustrated and snatches it from her. She threatens to tell and he puts his head down and refuses to take any more part. Next they have to take their paperclip for a walk. Ellen watches Jack do it first. He is unable to do it. The teacher shows the both of them. Tom and May argue but do their own sheets. Eve is the most focused even though she says, "This is hard!" Kevin watches the 1<sup>st</sup>/2<sup>nd</sup> test then goes down to Jack. He returns to his place. He starts bossing everyone at his table. He does not do his sheet. He pokes at Tim with the magnet. Tom finds a pin from the picture board and goes down to put it back. He spends the next five minutes wandering at the back of the room. He eventually goes back to work. Kevin watches the fishing being made. He accidentally falls off his chair then goes over to another table to look. Ellen, Sue, Jack and Eve are all on task. By the end of the lesson Tom is wandering again this time over at the game shelves. Eve asks, "Aren't I doing good?" All the rest, apart from Kevin and Tom work.

Levels of participation in worksheet activity by infants:

Name:	Amount completed				
	¼	½	¾	Completed	Comment:
<b>Junior infants</b>					
Beth		✓			Lines drawn. Messy colouring.
Lara			✓		No line. Neatly coloured.
Mags			✓		Line drawn. Neatly coloured.
Chris			✓		Lines drawn. Neatly coloured.
Tim				✓	Line drawn. Neatly coloured.
Bob	✓				Lines drawn everywhere. Little colouring.
Tony				✓	Line drawn. Neatly coloured.
<b>Senior infants</b>					
Ellen	✓				Line drawn. Little colouring. Very neat.
May			✓		Line drawn. Neatly coloured.
Eve	✓				Lines drawn. Extremely neat colouring.
Kevin		✓			Lines drawn. Colouring good.
Jack		✓			Lines drawn. Neatly coloured.
Tom	✓				Sheet covered in lines. Extremely neat colouring.

## Lesson 6 - Mapping (Infants) Planning (1<sup>st</sup>/2<sup>nd</sup>)

The lesson begins with question time. The children were asked about littering and how to prevent it and what plans are and what maps are and when you could use them. The following children did not attempt an answer:

Bob, Tim and Tony

Eve, Tom and Ellen.

Ann.

### Evidence from video clips and teacher observation:

Junior infants - Seven children were present at this group, three girls and four boys. Mags-4, Lara-4, Beth-5, Chris-4, Bob-4 Tony-5 and Tim-4. The children are given a worksheet on which they draw a route for Red Riding Hood to follow through the woods. They have to keep her away from the wolf. Chris, Tony, Mags, Beth and Lara all begin. Tim can't find a pencil but when he does he concentrates well. Tony gets up for colours and tells Bob, who hasn't started the route to draw. Bob does not have a pencil and keeps asking Tim for one. He ignores him. Bob goes around beside Tim but he ignores him for a while. Bob tries to tell Tim where to draw the line. Tim finishes and gives the pencil to Bob. Tony comes again for colours and converses with Bob. The rest of the juniors work purposely. Jack looks for colours and Bob tries to get him to draw his line he does not. Tony and Tim fight over pencils. When I sort out the argument Tony returns to work but Tim remains off task as does Bob. Chris very focused comes up and says, "I think I've the most done in my class." Bob continues to try to get Tim's attention. Tim scribbles to get finished.

Senior Infants- Five children were present, three girls and two boys. Tom-6, Jack-6, Ellen-6, Eve-5 and Sue-5. The children start drawing their routes. And then progress to colouring. Tom comes up 10 seconds into task to say he is finished. He is not. He goes back to colour but sits staring at the ceiling, then into space and then around the room. Eve very on task saying, "Miss I'm on my colouring". Sue, Ellen and Jack work well also. Tom has a problem getting something to colour with.

### Levels of participation in worksheet activity by infants:

Name:	Amount completed				
	1/4	1/2	3/4	Completed	Comment:
<b>Junior infants</b>					
Beth			✓		Correct route
Lara			✓		Correct route
Mags			✓		Correct route
Chris			✓		Correct route
Tim				✓	Correct route. Messy work.
Bob	✓				Correct route (Helped by Tony)
Tony		✓			Correct route
<b>Senior infants</b>					
Ellen	✓				Correct route
May		✓			Correct route
Eve		✓			Correct route
Jack	✓				Correct route
Tom	✓				Correct route. Very little done.

### Evidence from video clips:

In the 1<sup>st</sup>/2<sup>nd</sup> group six children were present- Pseudonyms- Donal-8, Pat-7, John-7, Tara-8, Ann-7 and Jen-6. They have to draw a plan of our classroom using the key provided on the sheet. All start except for Ann. Pat chats to Donal and Tara while they work but Ann does not work. John and Jen are engrossed in their plan. Ann remains stuck but does not ask. She throws sneaky glances at the others' work but tries to be unnoticed. She shows signs of frustration rubbing her forehead and eyes. John comes up to ask a relevant question then goes off into a story. Ann appears to start but as soon as she does she is rubbing. This continues for a few minutes then the teacher goes over to help. She has very little done but insists she does not need any help so the teacher leaves her. Pat loses focus and begins to show off to the camera. He calls to Tara. They discuss the camera then return to work. John then starts to show off. He succeeds in getting everyone's attention except Ann and Donal. Ann is trying to copy from Pat. He does not notice. Ann realises everyone is nearly finished and frantically starts drawing.

Levels of participation in worksheet activity by 1<sup>st</sup>/2<sup>nd</sup>:

Name:	Amount completed				
	¼	½	¾	Completed	Comment:
<b>1<sup>st</sup> class</b>					
Jen				✓	Quite accurate.
Ann	✓				Incorrect. Copying example on sheet.
John		✓			Correct.
<b>2<sup>nd</sup> class</b>					
Donal				✓	Correct. Very accurate.
Tara				✓	Correct. Very accurate.
Pat		✓			Quite accurate.



## Lesson 7 - Revision of magnetism (Infants) and reactions (1<sup>st</sup>/2<sup>nd</sup>)

The question time used these questions: What are magnets and can you tell me anything about them? What is a reaction? Can you tell me anything about a volcano? The following children did not attempt to join in during the discussion:

Tim and Tony

Eve and Tom

### Evidence from video clips and teacher observation:

In the 1<sup>st</sup>/2<sup>nd</sup> group six children were present- Pseudonyms- Donal-8, Pat-7, John-7, Tara-8, Ann-7 and Jen-6. They all had plenty to say about volcanoes and became animated when told we were to make a reaction in a volcano of our own. They are asked to get a board on which to make their volcano. Ann comes back with an inadequate board so the teacher asks her to get another which she does, happily. Jen tries to get the same board as Tara. The teacher gives out the modelling clay and they begin instantly. It isn't long before John tries to get some attention shouting, "Look at my pencil it's covered in clay!" The rest continue modelling, barely looking up. Tara leans back in her chair to ask the senior infants if they are doing the same as junior infants, then she returns to task. Ann and Pat watch her briefly. Jen, Donal and John stand to do their modelling. Each is engrossed in the job. John shouts to me, "Miss! Look at mine!" He continues. All but Ann have the mountain shape made. She is holding the clay in her hands in a ball shape. Jen asks for more clay. Tara asks, "Why does Jen need so much?" jealously. Jen finishes hers and brings it to me saying, "Look at mine Miss! Doesn't it really look like a volcano?" She repeats this to Tony who is standing nearby. John lifts his worksheet and tries to get Donal's attention saying, "Look. We'd better run! This is what's gonna happen to us!" waving the picture of people fleeing. No one looks up. Ann's is still a ball. Pat says, "Mine is starting to take shape!" John starts to brag about how good his is and Tara says, "Miss isn't it not nice to say mine's is the best or something. You have to say everyone is trying their best. Don't you!" A few minutes later John is finished. Jen and he go to wash hands. Ann copies Pat's mode of construction but makes it too wide and she runs out of clay. The teacher intervenes and shows her how to make it narrower. Jen also tells her to, "Put some on the bottom too!" Donal, Tara and Pat continue to work independently. Pat remakes his. Donal finishes. Ann continues to look around not as focused as others. John now supposed to do worksheet

(colouring) asks, “Miss. Can we try it out? Are we allowed to bring it home?” Tara has created a very neat model and asks Donal who previously made one at home “Was yours wrecked when you erupted it?” Jen comes around beside Tara to watch her modelling. She remains there for five minutes. The children then get to test their volcanoes John is very excited but methodically carries out the test as does Jen. Ann is quite reticent about how many spoonfuls of bread soda to put in and complains a lot about the vinegar smell. John wants to show experiment to the other classroom.

Levels of participation in activity and worksheet by 1<sup>st</sup>/2<sup>nd</sup>:

Name:	Amount completed				
	¼	½	¾	Completed	Comment:
1 <sup>st</sup> class					
Jen				✓	Well presented. Neat.
Ann	✓				Unable to complete task by herself. Nervous about testing.
John			✓		Well presented. Neat colouring.
2 <sup>nd</sup> class					
Donal				✓	Well presented. Neat colouring.
Tara			✓		Extremely neat and well made.
Pat		✓			Good volcano. Incomplete worksheet.

### Evidence from video clips and teacher observation:

Junior infants - Seven children were present at this group, three girls and four boys. Mags-4, Lara-4, Beth-5, Chris-4, Bob-4 Tony-5 and Tim-4. The infants are given a sheet with various objects on it. They have to cut them out and stick them on another sheet depending on whether or not a magnet is attracted to them or not. Testing later. It must be noted that there are two different sheets given out so to eliminate the chance of copying. All begin with enthusiasm. Tony distracts Chris momentarily but he returns to task. Lara and Beth chat but continue with cutting. Bob and Chris watch the 1<sup>st</sup>/2<sup>nd</sup> task open-mouthed. Chris returns to work but Bob remains off-task looking around. He then asks to go to the toilet. When he returns he looks at Eve’s work rather than his own. Tim is

focused as are the girls. Bob comes up to ask can he take around the bin for rubbish but he is not finished his task. Tony gets up and stares at 1<sup>st</sup>/2<sup>nd</sup> and asks, “Miss is there going to be gooey stuff coming out?” Later when the children are asked to test their answers all are quite eager although Tim yawns. Tony and Lara don’t put up their hands for the first go but do after this. Tim’s hand is up for them all as are the rest except Bob who looks bored. When he does have a go he puts the object in the incorrect pile. When it is Tim’s turn he spots and rectifies the mistake.

Senior Infants- Five children were present, three girls and two boys. Tom-6, Jack-6, Ellen-6, Eve-5 and Sue-5. All five begin cutting. Tom is constantly talking whilst cutting but no-one listens to him and he is content to persist. Jack asks the teacher, “Where does the zip go?” but the teacher tells him to guess. The girls are very focused for the entire lesson. Tom becomes quieter and finishes his gluing first. The teacher instructs him to colour which he begins. Eve helps Bob decide where the objects go. Jack wanders over to the 1<sup>st</sup>/2<sup>nd</sup> group and asks, “Whose (volcano) is the highest?” He returns to his seat. Tom starts to wander nearing the end of the lesson but returns to seat when asked. During the testing Ellen and Tom talk but the teacher asks Tom to have a go and this brings them both back on task.

Levels of participation in worksheet activity by infants:

Name:	¼	½	¾	All	Comment:
<b>J.I.</b>					<b>No. of correct answers(out of 8)</b>
Beth				✓	7
Lara				✓	7
Mags			✓		6
Chris			✓		6
Tim				✓	4- Stuck them all to the same side.
Bob				✓	7-very messy.
Tony				✓	3- Missing one of his objects.
<b>S.I.</b>					
Ellen			✓		8
Sue			✓		7- One is missing.
Eve			✓		8
Jack			✓		7
Tom				✓	8- Very neat.
					<i>N.B.</i> No evidence of copying. Eve helping Bob.

## Lesson 8 - Body parts

The teacher asked the children could they name a part of the body. The only two who did not participate were Tony and Bob.

We then played a game which involved the teacher calling out a body part e.g. head and the children pointing to it on their own bodies. All participate. John makes a few distracting noises during the game. Neither Bob nor Tony know the nostrils.

### Evidence from video clips and teacher observation:

In the 1<sup>st</sup>/2<sup>nd</sup> group six children were present- Pseudonyms- Donal-8, Pat-7, John-7, Tara-8, Ann-7 and Jen-6. 1<sup>st</sup>/2<sup>nd</sup> have two tasks. The first is the same as the infants i.e., the cutting out of a girl's arms, legs etc. and the arrangement of them together in the correct way on another piece of paper. The children are handed the paper from which they will cut the parts and they begin. There is no communication from any of the children for at least 4 minutes. Each is engrossed in their own cutting. Jen remains standing throughout the activity and comes up to ask for help cutting around the fingers. John breaks the silence by asking, "Miss! How come she's not wearing any socks?" Pat retorts, "She's in pyjamas!" laughing. A few minutes later John states "Miss! I didn't even chop one little bit off!" Donal, Jen and John are now standing. The teacher collects the sheets and gets them to begin their second task. This is to cut out the labels, which have body parts written on them, and glue them to match the correct parts. Jen and Donal remain standing. Pat messes waving at Tara and Jen. John holds up a straight piece of paper demonstrating how well he cut it out but no-one bothers to look up. Tim is circulating with the rubbish bin John extends his hand to block Tim's way behind the 1<sup>st</sup>/2<sup>nd</sup> group and tells him, "Don't go around here!" He has already put his rubbish in the bin but dose not consider the rest of the group. Donal comes up to the teacher and says, "I have just to glue and write my name and colour. Ann is still colouring. Pat looks at Donal briefly. Donal comes up again. This time he wants the teacher's scissors. Ann has started to glance around at the others answers. Tara spots her but says nothing. She then gives out to John for saying something silly (complete with a dirty look). Pat watches and laughs. Tara then puts her pencil case up in order to block Ann's vision of Tara's work. She whispers to Donal and he looks at Ann's sheet to see if what Tara is telling him is true. Ann looks blatantly at Jen's sheet as her back is turned. Tara comes up and says, "Ann is copying me, Donal and Pat 'cos she has the same ones done as us!" The teacher lets Tara sit down and ask if anyone wants help

reading the labels. Ann averts her eyes and does not answer but when the teacher walks around she asks, “Are those right?”

Levels of participation in worksheet by 1<sup>st</sup>/2<sup>nd</sup>:

Task 1

Name:	Amount completed				
	1/4	1/2	3/4	All	Comment:
<b>1<sup>st</sup> class</b>					
Jen			✓		Extremely neat cutting. Parts correctly placed.
Ann				✓	Poor cutting. Arms incorrectly placed. Legs attached to torso. Shorts omitted.
John				✓	Correctly placed. Colouring completed.
<b>2<sup>nd</sup> class</b>					
Donal				✓	Correctly placed.
Tara				✓	Extremely neat cutting. She labelled the parts.
Pat				✓	Correctly placed.

Levels of participation in worksheet by 1<sup>st</sup>/2<sup>nd</sup>:

Task 2

Name:	Amount completed				
	1/4	1/2	3/4	All	Comment:
<b>1<sup>st</sup> class</b>					
Jen			✓		Labelling correct. Colouring started.
Ann			✓		Labelling correct. No colouring.
John				✓	Labelling correct but carelessly placed. Colouring completed.
<b>2<sup>nd</sup> class</b>					
Donal				✓	Labelling correct. Colouring completed
Tara				✓	Labelling correct. Colouring started. Very neat.
Pat				✓	Labelling correct. Colouring started. Neat.

### Evidence from video clips and teacher observation:

Junior infants - Seven children were present at this group, three girls and four boys. Mags-4, Lara-4, Beth-5, Chris-4, Bob-4 Tony-5 and Tim-4. All the infants were given the same task i.e. the cutting out of a girl's arms, legs etc. and the sticking of these to a separate sheet in the correct manner. Bob begins cutting. Lara starts chatting and he is distracted immediately. Chris is sucking his thumb waiting for the scissors. Tim and Tony keep on cutting not looking up. Chris and Mags put up their hands eagerly for scissors. Beth and Lara chat. Lara looks around at senior infants and is off task. Chris and Mags begin but Tony is messing with scissors. Girls are now working. Bob looks at Tim's work then begins cutting again. He says, "Miss! I'm on my last two things!" Mags and Chris have a fight over where he puts his bag but go back to the task. Tim has not been distracted at all. Tony starts to chat and Lara listens. Tim says, "Miss I just had to cut that (the leg). It's in my way." He has chopped the leg in half. The teacher tells him it will be alright when it is stuck to the sheet. Lara once again turns to face the senior infants and looks at Tom. Tim asks, "Do you have to colour?" Bob states "Miss! I've lost two of my things!" Chris leans over the table to talk to Tony. A conversation starts. Then Chris comes up to find out where he should put his scissors. Tim has completed the task, albeit wrongly, and takes around the rubbish bin. He then wants to take the scissor box around. The teacher tells him to fix his colouring. Bob is completely off task watching Tim. He is actually waiting on the glue which Tim is not sharing. He eventually gets it. He says, "Miss! I'm making mine the right way". Mags loses a part then finds it. Chris tells her to put the things on her other sheet as she cuts them out. Lara shows the teacher her gluing then goes to colour. Chris tells the teacher, "Bob cut a bit off and I glued it back for him". Bob is now wandering and wanting to collect scissors. He has not finished so in the end Tim gets the scissor box. It takes a while for Bob to concentrate again and to get back on task.

Senior Infants- Five children were present, three girls and two boys. Tom-6, Jack-6, Ellen-6, Eve-5 and Sue-5. Eve starts to give out the scissors and glue. She wants to share with May but they are not sitting together. She takes far too long them give out. Tom is very motivated and works away. He still has to talk even if no-one answers. He says, "I've only one thing left to cut out ". He holds it up and no-one looks. He throws his hands in the air (nearly finished). He shouts at Jack, "Have you got your hands cut out? I have". He continues in this manner. Eve is focused when she begins. May talks but also works. Ellen cuts the head off hers and comes to see what she should do. Tom finishes and comes to

show. The teacher tells him to come back when he has coloured. Eve comes to say that Tim is not sharing the glue with Bob. Jack goes to wash the glue from his hands .When he returns he is off task looking at his fingers. It takes a while for him to begin his colouring. May puts hers on the wrong way and comes up for help as she has ripped it trying to fix it.

Levels of participation in worksheet activity by infants:

Name:	Amount completed				
	¼	½	¾	Finished	Comment:
<b>Junior infants</b>					No. of correct answers(out of 7)
Beth	Beth & Lara copied each other			✓	5- Coloured and decorated.
Lara				✓	3-coloured and decorated.
Mags				✓	7- Coloured and decorated. Badly formed.
Chris				✓	7- Coloured and decorated.
Tim				✓	2- Did not form the girl. Very messy.
Bob				✓	5- Very squashed and messy.
Tony				✓	5- Nicely coloured. Legs on shorts.
<b>Senior infants</b>					
Ellen			✓		5- No colouring. Legs too far under shorts. Head cut too small.
May			✓		7- No colouring. Perfectly placed.
Eve			✓		5-No colouring.
Jack				✓	5- Very neat. Arms muddled.
Tom				✓	7- Very neat.

## Lesson 9 -Look outside

Question time was kept to the end of the lesson today. I simply asked everyone to tell something that they saw or even heard. They are all very responsive. Most notably Tim who interrupts the others with his enthusiasm for telling things. Ellen and May are also animated and recite long lists of things.

### Evidence from video clips and teacher observation:

In the 1<sup>st</sup>/2<sup>nd</sup> group six children were present- Pseudonyms- Donal-8, Pat-7, John-7, Tara-8, Ann-7 and Jen-6. Their task is to work individually and place a hoop anywhere in the grounds and count the number of flowers inside it. There is an accompanying worksheet. We go outside and the teacher tells them to get working. Immediately John throws down his hoop on a nearby flowerbed and says, "Miss! Look what I found!" Donal and Pat wander around the wider playground independently, having a good look around. Ann finds a spot away from everyone looks at the flowers in the bed but does not put her hoop anywhere. Tara quickly finds a spot. Jen wanders over to her but does not stay. John asks, "Miss! Do we do this again when we are finished?" Still working. Jen and Donal are still wandering around. Pat finds a place and shouts to Donal. He ignores him and moves beside Tara. Ann then appears in between Tara and Donal (They are very close together.) Tara says to her, "Go down a bit!" Jen and Pat end up beside each other. Tara then calls to me, "Can't you not move again!" complaining about Ann. John keeps questioning about counting. He wants to know if he should count each individual head on the bluebells. Ann is not counting. She has placed her hoop on the ground. Tara tells her what to do. Ann just watches Tara. In the end the teacher goes over to Tara as she has spent too long counting the multitude of daisies. The teacher tells her to count them roughly. Ann has written in some numbers but there has been no evidence of counting.



### Analysis of worksheets:

✓ = attempted participation

✓ = correctly answered

X = no participation

1 <sup>st</sup> /2 <sup>nd</sup>	Section 1	Section 2
Donal	✓	✓
Tara	x	✓
Pat	✓	✓
John	✓	✓
Ann	x	✓
Jen	✓	✓

### Evidence from video clips and teacher observation:

Junior infants - Seven children were present at this group, three girls and four boys. Mags-4, Lara-4, Beth-5, Chris-4, Bob-4 Tony-5 and Tim-4.

Senior Infants- Five children were present, three girls and two boys. Tom-6, Jack-6, Ellen-6, Eve-5 and Sue-5. They are grouped roughly by their ages in the following manner:

Group 1-	Lara, 4	Group 2-	Eve, 5
	Chris, 4		Sue, 5
	Tim, 4		Beth, 5
	Bob, 4		Tony, 5

Group 3- Jack, 6  
Ellen, 6  
Tom, 6

Their task was to find whichever hoop roughly told them, they were numbered, and draw onto their sheets everything they could see inside the hoop. They had to be careful to draw into the corresponding hoop on their sheets, also numbered.

Group 1 was the youngest group. The teacher tells them which number to find. Bob runs headlong but then stops. He and Lara follow Chris who has taken off running noisily. Tim follows them but way behind. The group chooses a hoop but then Chris runs to another. Bob and Tim run after him while Lara remains staring at the hoop. Chris realises his mistake and brings them all back to Lara. Lara begins her sheet first. Chris and Tim follow suit. Bob watches Lara for a while. He messes about for a while. So does Chris who throws his worksheet in the air. When it is time to move to the next hoop Bob is lost. He has not

drawn anything. His team have moved on but he remained trying to draw something. Chris calls for him to come over. He does. Tim and Chris are now off task. Chris is throwing his sheet up again. Lara watches. Bob sticks his pencil repeatedly in the dirt as does Chris. Then Bob lies in the sun.

Group 2 was the five year olds. When asked to find their hoop the three girls immediately take the lead with Tony following behind. Eve comments, "There's a lot of stuff in it!" She is first to sit down and the rest follow suit. May asks Eve a question and Eve gestures towards the hoop with her hand. Beth and Tony begin also. It is not long before Eve and May realise that they have written in the wrong hoop. They come over to the teacher and rectify their mistake; May goes in for her rubber. Meanwhile Tony and Beth are still concentrating. At the next hoop May sits down first while Tony and Eve take quite a while to settle.

Group 3 was the six year olds. Ellen finds the hoop first. Jack has taken off, at great speed, towards the other hoops but both Ellen and Tom call him back. Tom begins right away. Jack and Ellen sit down and begin. Tom is now standing but still he is on task. Ellen is concentrating and Jack is copying from her drawing. By the second hoop Jack is beginning to lose concentration. He jumps up and down beside the hoop. At the third circle Jack and Tom are messing at the beginning but return to task after a while. Ellen watches them. Tom becomes increasingly noisy. He begins to pull out the grass. He lifts the hoop and sets it down again. The teacher has to tell him to get back on task. He does so for a while.

### Analysis of worksheets:

✓ = attempted participation

✓ = correctly answered

X = no participation

Group 1	Area 1	Area 2	Area 3	Comment
Lara	✓	✓	✓	Very accurate
Chris	✓	✓	✓	Area 1 has little detail.
Bob	✓	✓	✓	Area 2 has little detail. Other sections little detail.
Tim	✓	✓	✓	Little accuracy in areas 2& 3
Group 2				
May	✓	✓	✓	Great accuracy in area 1. Little drawn in area 3.
Eve	✓	✓	✓	Excellent effort in area 1. Good in 2. Less detail in 3.
Tony	✓	✓	✓	Excellent effort.
Beth	✓	✓	✓	Not much detail in area 1.
Group 3				
Jack	✓	✓	✓	Only one flower in area 1.
Tom	✓	✓	✓	Less detail in area 3.
Ellen	✓	✓	✓	Very neat. Less detail in area 3.

## Lesson 10 - Planting

At the end of the lesson the children were asked to recall and describe what they planted or to say what they did. The following children did not respond:

Bob and Tony.

### Evidence from video clips and teacher observation:

In the 1<sup>st</sup>/2<sup>nd</sup> group six children were present- Pseudonyms- Donal-8, Pat-7, John-7, Tara-8, Ann-7 and Jen-6. Junior infants - Seven children were present at this group, three girls and four boys. Mags-4, Lara-4, Beth (5), Chris-4, Bob-4 Tony-5 and Tim-4. Senior Infants- Six children were present, three girls and three boys. Tom-6, Jack-6, Kevin-6, Ellen-6, Eve-5 and Sue-5.

The children were all divided into groups according to their ages:

#### Group 1 (4 year olds)

Mags  
Chris  
Bob  
Tim  
Lara

#### Group 2 (5 year olds)

Tony  
Beth  
Eve  
Sue

#### Group 3 (6 year olds)

Tom  
Jack  
Ellen  
Kevin  
Jen

#### Group 4 (7-8 year olds)

Tara  
Donal  
Pat  
Ann  
John

The first task the children have to do is to fill their planting box with compost. The teacher observes all groups and the only child who doesn't participate is Ann. She is blocked by the other children and makes little effort to get around them. At the end she gets a few handfuls. Next each group have to plant a flower/vegetable each.

All are excited in the 1<sup>st</sup> group. Mags shouts "Miss! I'll go first". Bob picks a plant but checks with the teacher if it's one or two. Chris inquires what the name of his is. Lara specifies that she wants a marigold. Tim and Lara quietly plant theirs. Mags wants another. Tim gets another out of turn and returns it when asked. When we go inside the children have to draw what they just did. Bob states, "I did my name". Later he

states, “I did long stems”. Tim works independently. Lara and Mags talk about what they are doing, to each other. Great focus.

Group 2 are equally enthusiastic. Eve spends ages picking her plant. The teacher discovers that she is trying to get the same as May and is unhappy when there is none left. The rest plant quietly. Beth picks another out of turn. She puts it back. She remains standing looking for another chance. Inside they are all working independently. Beth comes to the teacher with a question. Great focus.

Group 3 are enthusiastic but not as harmonious. While filling the compost Jen gets annoyed saying, “Hey they don’t need anymore miss!” She gets annoyed about being blocked and voices her annoyance. The teacher has to tell Kevin to behave. He was messing with compost. Jack, “Can you choose two?” Very enthusiastic. Kevin puts a worm in the box and tries to keep it there. The others want it out. It stays in. Later Jack complains that there is no room in the box. He thought there was only supposed to be one plant for the box. After planting Jen wanders over to group 4. She was unhappy to be at group 3. Inside Tom starts to wander looking for a pencil. Jack comes to tell that Kevin is fiddling with his stuff. Kevin fights with Jack. Jack looks over at Tom who is now focused and remains so. He is on –task and he does not want to stop the task.

Group 4 begin putting compost in their box. John tells Chris to get compost from the other bag. Donal complains he can’t get compost, but he perseveres. Ann doesn’t get compost. She sits quietly on the far side of the box. Tara complains that everyone is getting soil everywhere. John tells Donal to back around the other side of the box. He ignores him. Ann comes around when there is room for getting compost. When they are getting plants Ann stands on one of the plants. Tara asks, “Can we start right away?” Donal says, “I don’t think there is any lettuce left!” He finds one. Ann is last to plant. She doesn’t force her way in to the box. Inside Pat tries to get Donal’s attention almost immediately, “Look here Donal”. Ann looks at John. John and Pat talk off-task. Ann gets back to work. Tara and Donal are also focused. John asks, “How many plants did we plant?” Tara, “Ten!”

Participation during work indoors:

✓ = participation

Name	Wrote	Drew	Comment
<b>Group 1</b>			
Mags	✓	✓	Completed accurately. Great detail.
Chris		✓	Good but missing details.
Lara	✓	✓	Completed accurately
Tim	✓	✓	No recognisable plants. Dahlia written. Incomplete.
Bob		✓	Very messy. Scribbles apparently represent muck. Flowers drawn.
<b>Group2</b>			
Eve		✓	Completed accurately. Excellent detail.
May	✓	✓	Completed accurately. Excellent detail.
Tony		✓	Completed accurately. Excellent detail.
Beth	✓	✓	Good effort but incomplete.
<b>Group 3</b>			
Jen	✓	✓	Completed accurately. Excellent detail.
Jack		✓	Excellent effort but incomplete.
Ellen	✓	✓	Good effort but incomplete.
Kevin		✓	Not much effort but picture is accurate.
Tom		✓	Good but missing details.
<b>Group 4</b>			
Donal		✓	Lacking details of plants.
Ann	✓	✓	Good but missing details. Completed.
Tara	✓	✓	Completed accurately. Good detail.
Pat	✓	✓	Completed accurately. Excellent detail.
John		✓	Completed accurately. Excellent detail.

## Lesson 11 - Construction

The lesson began with questions such as what is your house made off? Whose house has stairs/ none/ etc. The following children made no response

Chris, Tony, Lara and Bob.

Eve and Jack.

Ann, Jen and Pat.

### Evidence from video clips and teacher observation:

In the 1<sup>st</sup>/2<sup>nd</sup> group six children were present- Pseudonyms- Donal-8, Pat-7, John-7, Tara-8, Ann-7 and Jen-6. The children were divided in half. One group of boys and one group of girls. They were told to make a house for the teddy which the teacher had given them.

The boys' group begin immediately, grabbing lots of materials and bringing them to their side of the table. All three are on their feet and actively involved. All have specific ideas and things that they want to try out and do so. They work silently for the first while then they began conversing and telling each other their ideas and opinions. They are continually grabbing new bits and bobs and thinking of a way to incorporate them in their house. They pass the main body of their house from one to the other. All have scissors and all are on task. They all remain standing. Donal and John come to show the teacher their ideas. John says, "We got satellite!" Donal comes and asks the teacher how to make a satellite dish. John speaks loudly about Sky. All the boys come to show the teacher their house as it develops. They continue discussing and acting on their discussions. The teacher has to tell John to turn down his volume. John shows their design to infants.

From the offset the girls remain mostly seated. Tara complains at the beginning that the boys are grabbing too much. She says, "Can't you only take one thing at a time? Don't take a big handful!" She waits for the teacher's reply then grabs a few more things for her team. The other two don't move. Tara tells Ann and Jen what their house is going to be like. They are sitting passively and don't flinch. Later Jen lifts a box and Tara tells her to leave it. Tara herself is cutting another box. Ann watches Jen who is getting frustrated. Tara passes a box to Ann and tells her to, "keep that!" She obliges. Jen is trying to develop her own idea for the design of the house. She tries to convey these to the other two but Tara will not listen. They are still all sitting. Jen rubs her forehead in frustration and tries to reiterate her ideas. She is still ignored. Tara watches the boys. Jen

stands up to tell the others how to make the windows. Tara tells her it doesn't matter. Ann is completely off-task waving a box in Jen's face. Tara asks the teacher, "Can we paint them?" Jen remains standing trying to get involved. Ann remains seated and does not attempt to join in. She is between the other two. Tara begins to cello tape. The others watch. Ann plays with the teddy. Tara whispers to Ann, "We're gonna beat the boys!" Ann passes the message to Jen. Ann tries to join in asking, "What could we use this for?" Tara immediately suggests a fence. Jen continues to construct and eventually moves around to help Tara cello tape. Ann still does not react. Ann watches the boys. Tara talks about the roof to both girls. Ann does not respond or give an opinion. Eventually she makes an attempt to get the cello tape but is blocked by the boys. She gives up. She collects some matchsticks but does not do anything with them. Tara tells her to get scissors which she immediately goes to do. She returns and hands them to Tara.

#### Evidence from video clips and teacher observation:

Junior infants - Seven children were present at this group, three girls and four boys. Mags-4, Lara-4, Beth-5, Chris-4, Bob-4 Tony-5 and Tim-4. Senior Infants- Five children were present, three girls and two boys. Tom-6, Jack-6, Ellen-6, Eve-5 and Sue-5. They are divided into boy or girl groupings. (Roughly age similar).

Bob (4) and Chris (4) sat for a while watching everyone else before starting. Chris asked, "what if everyone's the same?" Chris stands up to see what the others are doing. They begin and Chris instructs Bob as to what they will do. Bob obliges. Chris is reluctant to build along with Bob and tries to keep all to himself. He snatches the plasticine out of Bob's hands. Bob starts to build the walls but later states, "Me and Chris are stuck!" The teacher gives them some help and direction and Chris takes over again, "Yeah! Now we can do this! Yeah! Put this on." Bob says, "Chris and I are nearly done". They decide to get a car for their teddy. Chris shows Tony.

Mags (4) and Lara (4) get out of their seats immediately to get their materials. They are focused from the beginning to end. They work well together and give ideas equally. They do get stuck but when set on the right track proceed. Tony (5) and Tim (4) sit and watch for a time before starting. Tony then gets up to get some card. Tim follows him quickly. They spend some time looking at the 1<sup>st</sup>/2<sup>nd</sup> groups. Tony becomes focused and starts to build. He tells Tim what to do, "Make it like this!" Tim is not that interested but obliges for a time. Tony asks for help to



prop up his wall. He is very involved. Tim is mostly watching. Tony goes over to Chris to try to get a car from him saying, "Do you want to share?" Tim plays with the teddy.

Tom (6) and Jack (6) begin. Tom immediately stands up and becomes very loud and overbearing. He begins moulding the plasticine while Jack watches. Tom sees the others come up for extra materials and rushes up to grab. Jack begins when Tom has left the table. Tom returns stating, "This can be his bed!" Jack, "Yeah!" Tom works hard and fast. He tells Ellen and May to hurry up. Ellen complains about Tom being noisy. Tom continues to design and make fences etc.

May (5) and Ellen (6) discuss what they will do before starting. They begin working but become frustrated as time goes on and they don't have anything concrete. The teacher gives them some guidance. May stands up to work. Ellen gets annoyed by Tom talking loudly. May suggests, "Make a bedroom". Ellen answers, "No! The bedroom is upstairs"

Eve (5) and Beth (5) begin. Eve comes to get more things while Beth waits for her to return. Eve does most of the talking and Beth does what Eve says. Eve cuts and Beth rolls out the plasticine. This is the pattern and Beth becomes very quiet.

## Lesson 12 - Colours

The children were asked to name as many colours as they could think of. The following children did not attempt an answer:

Tara and Jen.

### Evidence from video clips and teacher observation:

In the 1<sup>st</sup>/2<sup>nd</sup> group six children were present- Pseudonyms- Donal-8, Pat-7, John-7, Tara-8, Ann-7 and Jen-6. The children were divided in half, one group of boys and one group of girls (as lesson 10). Task 1 was to draw or write four things each for four colours e.g. red = rose etc. The colours were red, green, blue and yellow. Task 2 is to paint and make the colour wheel, test it out and record what happened.

Before beginning task 1 the boys discuss who will do what. John immediately says, "I'll draw them!" He begins but all the boys have a turn. Donal and Jack wait for him to finish and then take a turn. Task 2 is next. Donal takes the sheet in front of him. Pat lifts it saying, "Donal! That's not fair! It's supposed to be there!" He puts it the middle. Donal complains that he can't reach (He can) but Pat tells him to "Stand up". They begin. Donal stands the others sit. John tells the teacher, "Miss we're nearly finished!" Pat does the cutting. Donal tells them to, "Use my pencil for the wheel!" They do. They progress through the task quickly and are smiling and content throughout. Towards the end John begins showing off talking in a funny voice and walking strangely. Donal comes to get help inserting his pencil. John asks, "Can I do it for our table?" (Spin the wheel) He then talks about Pat getting a new puppy. The teacher tells him that she does not want to hear news. He tests the wheel. At the end all the boys tidy up.

For task 1 Tara immediately grabs the paper and starts writing. Jen leans over Ann and relays her ideas. Tara then passes the sheet to Jen over Ann. Jen writes. Tara asks, "Miss Can we pick a name for our team?" She grabs the sheet from Jen to write the name. Tara and Jen discuss a name. Tara leans over to the boys to check if they have a name. Ann talks to Jen when Tara is talking to the boys. Task 2 begins and all girls dip their brushes in the water simultaneously. Tara asks, "Miss Can we start now?" Tara asks to mix the orange but Jen beats her to it. Tara instructs Ann exactly what to do saying, "Try to keep it as neat as possible" then Jen puts green paint in the wrong place. Tara says, "Oh Jen. Miss what will we do?" The girls are all seated and painting. They all look serious. Tara tells Jen to, "Do the green first!" She does. Tara to Ann,

“You just wait. It’ll be too hard (to paint) till we’re done”. Ann waits. Then Tara says to Jen, “Let Ann do the orange”. She does. Ann has barely uttered a word throughout the lesson. Tara asks, “What do we do now?” Tara cuts out the wheel. Then says, “Miss! I’ll put the pencil through now!” Jen asks, “But why can’t you give it to me?” No answer. Tara tests. Tara, “It just falls!” Jen watches with interest. Ann doesn’t. Tara comes up for cello tape. Others wait. Ann messes with her brush. At the end Tara tells Ann to fill out one of the answers. She helps Ann with the spelling. Jen and Tara do the tidying.

Participation in Task 1:

Group	Red	Yellow	Blue	Green	Comment
Boys	Paint		Sky	Stem	
			Ocean	leives	
			Parrot feather		Items randomly placed on sheet.
			Blue shark		Pictures and writing
Girls	Apple	Sun	Apple	Sky	
	Strawberries	Duckling	Grass	Blue eyes	
	Grapes	Chick	Leave	Ink	
	Tulip	Banana	Stem	Bluebells	
					Each colour is in its own line. Tara has written, “By us all!” Ann has not written. Pictures and writing.

Participation in task 2 (Worksheet):

✓ = participation                      X= no participation

Group	Cutting	Testing	Writing	Comment
Boys				Boys painting messy but correct.
Pat	✓	✓	X	
John	X	✓	✓	
Donal	X	✓	X	
Girls				Girls painting extremely precise.
Tara	✓	✓	✓	
Ann	X	X	✓	
Jen	X	✓	✓	

**Evidence from video clips and teacher observation:**

Junior infants - Seven children were present at this group, three girls and four boys. Mags-4, Lara-4, Beth-5, Chris-4, Bob-4 Tony-5 and Tim-4.

Senior Infants- Five children were present, three girls and two boys. Tom-6, Jack-6, Ellen-6, Eve-5 and Sue-5. The teacher divided the children into boy or girl groupings as lesson 10. Task 1 is to write or draw as many red things as they can think of. Task 2 is to paint the colour wheel and test it.

Bob (4) and Chris (4) sit for a while before starting. Bob writes his name. Chris just watches Tony and Tim. Then he puts his head down and watches Bob. They look stuck. Chris decides to begin and brings the sheet over beside him. He covers his work from Tony and Tim. Chris tells Bob to look at the walls. They both do so. In task 2 they are more engaged. They put the sheet in the middle and Chris tells Bob what to do. He checks the colours with the teacher. At one stage Chris lifts Bob's arm out of his way and Bob lets him. Bob tells the teacher, "Chris and me are doing it really quick!" Chris cuts and does test.

Mags (4) and Lara (4) start right away. Lara writes their names. They discuss different red things and both draw at the same time. They are still focused in task 2. Mags, "Miss! Look I made orange!" Mags cuts and does the test. Lara tries to test but Mags won't let her. Lara waits patiently. Tony (5) and Tim (4) begin with Tony squabbling with Tim. He complains, "Tim is not sharing". Tim gives the sheet to Tony and Tony starts the drawing. Tim watches then joins in. They watch Chris and Bob. In task 2 Tony complains, "Tim is doing it wrong", and asks, "Can I do

another sheet?” Tim has coloured the wrong colours. They proceed. Tony cuts and tests. Tim watches.

Tom (6) and Jack (6) begin with the sheet in front of Tom. He tells Jack to look around the room for things. Tom gets out of this seat but returns quickly and is focused. He stands and sits in rotation throughout the lesson. In task 2 Tom again hogs the sheet. The teacher has to tell him to let Jack join in. Jack says nothing but joins in then. Tom says, “We need pink!” Jack tells him, “No! It’s purple”. When the painting is completed Tom puts the sheet in front of him again. Tom cuts and Jack has his head in his hands. Tom tests.

May (5) and Ellen (6) work together from the off set. May draws and Ellen gives her ideas. Then they swap. They put the sheets in the middle. Ellen stands to paint. May cuts and they both test. Eve (5) and Beth (5) begin. Eve wanted to be with May and was almost crying but she starts with Beth anyway. She does the drawing with Beth watching. She writes Lara’s name. She keeps the sheet beside her. Eve looks at Sue’s sheet for help. They both share the painting but Eve keeps the sheet closest to her. Eve cuts and tests.

Participation in task 1:

✓ = participation

Name:	Name written	Drawing	Giving ideas only	Comments
Chris	✓	✓		9 items
Bob	✓	✓		
Mags		✓		15 items. Lara wrote both names.
Lara	✓	✓		
Tony	✓	✓		5 items
Tim	✓	✓		
May	✓	✓		8 items
Ellen	✓	✓		
Tom	✓	✓		3 items
Jack	✓			
Eve	✓	✓		9 items. Eve wrote Beth’s name.
Beth			✓	

Participation in task 2:

✓ = participation

X= no participation

Group	Cutting	Testing	Comment
Chris	✓	✓	Chris's name is on wheel. Well painted.
Bob	X	X	
Mags	✓	✓	Mag's name on wheel. Messily painted.
Lara	X	X	Lara attempts to test but is prevented by Mags.
Tony	✓	✓	Unnamed and incorrectly painted.
Tim	X	X	
May	✓	✓	Ellen's name is on wheel. Well painted.
Ellen	X	✓	
Tom	✓	✓	Tom's name is on wheel. Very neat.
Jack	X	X	
Eve	✓	✓	Eve's name is on wheel. Very neat.
Beth	X	X	

## Lesson 13 - Sounds

All the children were asked to name what sounds they hear on the bus or at home. Here are the children who did not respond:

Bob puts up hand but does not give any answer.

Jack.

Ann.

### Evidence from video clips and teacher observation:

In the 1<sup>st</sup>/2<sup>nd</sup> group six children were present- Pseudonyms- Donal-8, Pat-7, John-7, Tara-8, Ann-7 and Jen-6. The first task was to listen in silence for two minutes and then record four things that they heard on the sheet. For task 2 the children were divided in half, one group of boys and one group of girls. They were given a strip of four instruments each which they had to cut out and stick under the following headings, blow, bang, shake and pluck. There were and additional four instruments which the teacher gave each group with no specific instructions on how to divide them.

The children work at recording their answers for task 1. Tara asks, "Can we just write them?" Jen takes a look at Tara's sheet then comes up for a spelling. Ann follows her immediately. Tara continues independently. John asks for radiator for a spelling. Tara asks, "Miss was that noise the radiator or the computer? I think it was the computer". The teacher concurs. Tara looks at John who rubs out his answer. Jen comes to say she heard a bump, "Will I just write it?" Tara suggest and Idea. Jen says, "I heard my belly". Tara tells Jen to cover her sheet. A few minutes later Ann comes up to ask for "tummy". Jen comes up again, "Will I just draw a girl for Miss G.?" (Heard other teacher). Donal and Pat complete theirs independently. In task 2 the girls all begin cutting. Tara finishes hers very quickly and starts to arrange the instruments on the sheet. She talks to Jen, "I think you bang this". Jen agrees. Ann watches. Tara takes two of the spare four and Jen lifts the other two. Tara asks, "Ann are you finished?" She is still cutting first four. Tara and Jen discuss what to do with a few. Ann continues cutting. Jen, "I know what to do with that one!" Tara, "I know too!" Later Jen comes to ask about two. When she returns she says, "I guessed for these two and I was right". Tara, "Excuse me! Do we glue them on now?" They begin. Ann looks like she is stalling. She rummages under the table. Tara says, "Sure that's all you have Ann. Miss Ann only had four!" Ann reappears with a glue lid. Tara says, "Oh! Right sorry". Girls all glue. They each have their own glue. Tara and Jen talk about chimes. Ann doesn't join in. Ann wonders where to put the

straw. She asks the girls. Tara asks but when the teacher does not answer Ann brings up the picture to the teacher. Tara states that they have to colour their own in. Ann is still gluing. Ann finishes her colouring very quickly and goes to collect the scissors for the teacher. In task 1 the boys are very quiet and focused. Donal remains seated while the others stand to cut. John starts to glue without any discussion. Donal does not have glue and does not go to get one. He waits for John to give him his. Donal mixes two of his with Pat's. The teacher finds them. Donal and John finish quickly. Pat is very slow. He messes pretending to play the banjo. The boys still only have one glue. Donal brings the sheet close to him to colour. He goes to the toilet and John sits in his seat. He does not move when Donal returns. Donal stands for a few minutes. Pat asks Donal where two of the objects should go. Donal comes to say that he is finished. Pat has not started his colouring yet.

Task 1 results:

Name	Noises heard	Comment
Pat	Computer Miss G. Talking Coughing Pen writing	Had pictures but rubbed them out.
John	Computer Pat clap two pencilling	Two pictures drawn.
Donal	Mrs. W. writing. Computer Pat spluttering Miss G. talking.	Pictures drawn.
Tara	Pat coughing The clock Miss G. Computer	Pictures drawn.
Ann	I could hear my tummy. I could hear Miss G. Pat cough I could hear the	No pictures. No independent thought. Copied.
Jen	Pat coughing Bump My belly Miss G.	Pictures drawn.



Task 2 worksheets:

Name	No. of Instruments	No. correctly Positioned	No. coloured	No. not Coloured	Comment
Pat	6	6	0	6	
John	6	6	0	6	
Donal	4	4	4	0	
					Instruments stuck over the headings.
Tara	6	6	6	0	
Ann	4	4	4	0	
Jen	6	6	3	3	
					Division line drawn, items neat.

**Evidence from video clips and teacher observation:**

Junior infants - Seven children were present at this group, three girls and four boys. Mags-4, Lara-4, Beth-5, Chris-4, Bob-4 Tony-5 and Tim-4.  
 Senior Infants- Five children were present, three girls and two boys. Tom-6, Jack-6, Ellen-6, Eve-5 and Sue-5. The children sat beside the same person as lesson 10 and 11. Task 1 was the same as 1<sup>st</sup>/2<sup>nd</sup>. Task 2 was to say the action poem and make the appropriate sounds, then colour the sheet.

During the two minutes Tony is very unsettled. He makes faces at everyone and especially Chris. Mags repeatedly tells him to shhh! He causes a disturbance at the junior table. The teacher warns him and starts the task again. He still tries to catch someone's eye. Mags is still telling him to behave. Bob closes his eyes to listen. Tony calms down. When everyone is told to draw Mags and Lara begin instantaneously. Bob and Chris follow suit. Tim looks for a pencil while Tony watches the others. Beth is focused. Mags spends a lot of time looking for a rubber. They all try to work except for Tony who tries to catch anyone's eye. At the end Chris is watching 1<sup>st</sup>/2<sup>nd</sup> and off his own task. During the poem Chris becomes loud. He lifts his sheet and bangs on it. Bob copies him. Chris makes faces and shows off as much as he can during the poem. The others do the actions normally. They then have to colour. Mags, Lara and Beth begin. Chris tries to poke at Bob to distract him. Bob ignores him and colours. Tim and Tony are on task colouring. Tony shows his work to

the girls. Mags, “That’s lovely!” Chris is still very unsettled. He spills his drink on his sheet and the boys laugh. The girls barely notice. The teacher intervenes to settle him. Eventually when he is getting no reaction he stares into space. Tim says he is finished but Tony turns his sheet and tells him to do that side. All senior infants are focused in the two minutes. When drawing what they heard Tom bobs up and down but seems focused. May works silently. Eve gets up for a rubber. Jack and Ellen talk. Next Ellen talks to Sue. Tom looks around gets up and messes with his chair. He says he is finished and he only heard one thing. They all participate in the poem and proceed to the colouring. They remain focused.

Participation in Task 1:

Name	Noises heard	Comment
Chris	Miss G.	Drew same person three times. Rubbed it out when told once was enough
Bob	Cows singing Boy upstairs singing People singing in tents	Overheard Tim mention the word singing and fixated on that. No understanding of task.
Mags	Cars, tractor, Miss G. and bus.	Well drawn
Lara	Miss G. and computer	Well drawn.
Tony	Miss G., radiator, tractor and bus.	Great drawings.
Tim	Horn, exhaust, people singing and bottle singing.	No understanding of task.
Beth	Miss G. and computer	Messy colouring.
May	Miss G. and computer	Very detailed drawings.
Ellen	Computer and Miss G.	Very detailed drawings.
Tom	A girl and computer	Didn’t understand task. Copied computer.
Jack	Computer and tractor	Very slow.
Eve	Miss G. and Computer	Coloured.

Participation in task 2:

✓ = participated

Name	Noises and actions	Colouring – ¼, ½, ¾ or completed.	Comments
Chris	✓	< ¼	Very unsettled.
Bob	✓	Completed	Very messy.
Mags	✓	¾	Neat
Lara	✓	½	Neat
Tony	✓	½	Neat
Tim	✓	Completed	Messy.
Beth	✓	½	Neat.
Sue	✓	½	Extremely neat.
Ellen	✓	¼	Neat
Tom	✓	½	Messy.
Jack	✓	½	Neat
Eve	✓	¼	Neat.

## Lesson 14 - Air

The children were asked, “How do you move things?” and “How can air move things?” They following children made no attempt to answer:

Mags, Chris, Tony and Tim.

Jen and Ann.

### Evidence from video clips and teacher observation:

In the 1<sup>st</sup>/2<sup>nd</sup> group six children were present- Pseudonyms- Donal-8, Pat-7, John-7, Tara-8, Ann-7 and Jen-6. Junior infants - Seven children were present at this group, three girls and four boys. Mags-4, Lara-4, Beth-5, Chris-4, Bob-4 Tony-5 and Tim-4. Senior Infants- Five children were present, three girls and two boys. Tom-6, Jack-6, Ellen-6, Eve-5 and Sue-5.

The children were grouped differently for this lesson. The children were grouped according to how actively they participated in previous lessons (according to teacher observations). They were mixed age and gender. Task 1 was to record as many things as they could think of that could be moved using air. Task 2 was to test out various objects from our spare table to see if they could be moved. They then had to colour the ones that could be moved.

Group 1, Tara (8), Chris (4) and Lara (4) began well with the two younger ones sitting on either side of Tara. She instructed them in what to do. Tara does the writing while the other two lean in towards her in a focused manner. When it comes to task 2 Chris is first up for an item from the spare table. Tara checks, “Don’t you colour the ones that do move?” All are seated. Lara is very quiet and quite passive. Tara colours an answer. Lara looks around uninterested. Chris and Lara come up to the table. Tara has told them what to get. Tara lets Lara test the balloon. Lara comes for the next item. Tara continues sharing goes. Later Tara comes up, “Miss I don’t know but Lara and Chris are not good friends!” They continue but Tara returns to tell me they are arguing again. Chris will not let Lara use his lunchbox for the test when it is Lara’s go. The teacher intervenes and they go back to working. Lara colours an answer. Chris comes to tell me, “We did them all!”

Group 2, Jen (6), Ellen (6) and Tony (5) work well in task 1. Jen writes and Ellen and Tony lean in to contribute. They stay on task. For task 2 they all stand, Jen in the centre. Ellen comes up for a straw. Jen comes for another item. Then Tony. It continues in this pattern.

Group 3, Ann (7), Tim (4) and Bob (4) works differently. Ann begins writing, the others watch. Then Bob looks around at the other groups. Ann and Tim remain focused. Ann comes for spellings. She doesn't attempt to involve the boys. Tim still watches her. Task 2 is quite different. Ann gets the balloon to begin. Tim goes to get a straw and she tells him that they don't need it to begin with (Wrong). The teacher intervenes and tells her she does need it. Bob is not participating. Ann stalls. They do not start. A few minutes later Ann comes to ask what to do. The teacher explains and Ann returns but does not start immediately. Tim watches her. She tells Tim to blow the balloon and says, "So we colour the balloon! No! Wait there a minute!" She comes to confirm that she is right. She colours it. There is no interaction. Ann gives Tim the leaf to test, "Right! See if that moves!" Bob grabs it, "I'm doing this!" They look at Ann to see what to do. She instructs them. Tim and Bob come up to the table for an item. Ann passes the sheet to Tim to colour. She asks him, "What did you do there?" He shrugs. "Right! Go and get another thing!" Tim goes to colour the wrong thing she tells him "No!" He chooses another correct item. He is really focused. Bob is not. He is in the centre of the group.

Group 4, Donal (8), May(5) and Beth (5). Beth and Donal begin task 1. May looks around totally disinterested. Near the end she joins in. Beth taps Donal when she wants his attention. Sue, "I know! I know!" She takes the pencil from Donal and draws her ideas. Beth comes to complain that Donal is thinking of all the things. Donal is first up to the table for task 2. He remains in a standing position while the others sit. Beth and Donal test while May colours. They all sit and work methodically. Beth comes to complain that people are not putting back the items on the table. May messes with the balloon.

Group 5, John (7), Tom (6) and Mags (4) are very slow to begin task 1. They sit passively for a while before the teacher reminds them they only have a few minutes. John whispers something to Pat about Mags. They laugh. Mags puts her head down until John talks nicely to her again. Tom remains quiet. When the teacher is explaining task 2 this group are talking. They do not hear. John, "Miss, do we need two straws?" Tom, "I got one!" John, "What do we do again? Do we colour them all?" The teacher explains again. They get working. Tom goes to the table. John tells them what to do. Mags goes to table. Tom remains standing. John, "Aren't you supposed to do one at a time?" Tom and Mags are both looking for different things. "Tom is off for paper when we are doing the book!" Tom returns without the paper. John tests sharpener. He appears

to do all the tests. He puts ticks on the ones to colour. John bosses Tom (Constructively). They are focused now.

Group 6, Pat (8), Jack (6) and Eve (5) do task 1. Jack begins as Pat hands him the paper and goes to sharpen. Eve tries to instruct him how to draw a kite. Pat returns and Jack gives the sheet to him. Pat continues. Pat comes up first for task 2. Eve follows him. Pat explains to Eve what to do. Pat tries to blow his lunchbox. Eve and Jack watch with interest. Eve comes to table. She tests the balloon. Jack, "It's going to blow away." Pat colours. Eve goes back to the table Jack follows. Eve colours. Jack comes up again then Eve. Jack and Pat converse about task. Jack tests the pencil. The entire group stay in close proximity to each other and are focused.

Participation in task 1:

✓ = participation

Name	Wrote	Drew	Gave idea	Comment
Group 1				21 responses.
Tara	✓		✓	Team name: The red hot devils
Chris			✓	Also individual names by Tara.
Lara			✓	
Group 2				11 responses.
Jen	✓	✓	✓	Team name: The red hot devils
Ellen			✓	By Jen
Tony			✓	
Group 3				8 responses.
Ann	✓		✓	Ann writes own name. Writes D for Tim, doesn't finish it.
Tim				Drawing rubbed out.
Bob				
Group 4				5 responses.
Donal	✓	✓	✓	Team name: Super hot devils by Donal.
May		✓	✓	Beth tries to give ideas.
Beth				
Group 5				4 responses.
John	✓	✓	✓	Unnamed.
Tom				
Mags			✓	
Group 6				8 responses.
Pat	✓		✓	Individually named by all.
Jack	✓		✓	
Eve	✓		✓	

Task 2 in order of completion:

Group	Order finished
1	3 <sup>rd</sup>
2	5 <sup>th</sup>
3	6 <sup>th</sup>
4	1 <sup>st</sup>
5	4 <sup>th</sup>
6	2 <sup>nd</sup>

Task 2 results in order of completion:

Name	No. of correct Items. Out of 12	comment
Group 4	12	Each child has written their name.
Group 6	11	Each child has written their name.
Group 1	12	Tara has written each name.
Group 5	12	John has written each name. Colouring unfinished. John has ticked and crossed appropriately.
Group 2	11	Jen has written each name. Extensive use of colours.
Group 3	9	Ann's name only. Mistakes corrected by Ann. Yes and no written. 2 ambiguous answers.



## Lesson 15 - Minibeast hunt

The children were asked, “How many minibeasts can we name?” and, “Who has seen one before?” The following children did not respond, Chris, Mags, Lara, Tony and Tim.

Eve, May and Ellen.

Ann.

### Evidence from video clips and teacher observation:

In the 1<sup>st</sup>/2<sup>nd</sup> group six children were present- Pseudonyms- Donal-8, Pat-7, John-7, Tara-8, Ann-7 and Jen-6. Junior infants - Six children were present at this group, two girls and four boys. Mags-4, Lara-4, Chris-4, Bob-4 Tony-5 and Tim-4. Senior Infants- Six children were present, three girls and three boys. Tom-6, Jack-6, Kevin-6, Ellen-6, Eve-5 and Sue-5.

The children were grouped as lesson 13. Task 1 was to go outside in their groups and find two minibeasts and observe them for a couple of minutes. Task 2 was to come indoors and draw these and also fill out a worksheet. Task 3 is to talk about what they found.

Group 1, Tara (8), Chris (4) and Lara (4) began well with the two younger ones following Tara. She calls Chris to follow her. They are all involved in the task with Tara taking the lead. During the task Tara comes up to ask what they have found, a conker with a minibeast in it. When doing task 2 Tara involves Chris and Lara in filling out the sheet. Later Lara looks off-task and detached from the group. In task 3 Tara prompts Lara to tell what she found, “Lara, what did you find?” Lara, “A baby slug”. She gets Chris to talk about finding things in the garden.

Group 2, Jen (6), Ellen (6) and Tony (5) set off for task 1. Immediately Tony goes his own way. Jen follows him and grabs him to drag him back to the group. He acquiesces. Later Ellen comes over to describe what they found. In task 2 Tony wanders for a short while before returning to his group. Jen and Ellen discuss the sheet but before long Jen comes to complain that Ellen is being cheeky to her. They continue to bicker and peace resumes when they do task separately. Ellen then asks Jen’s advice. Tony is unable to get a word in, in task 3. Ellen competes to give the information and they talk at the same time as each other.

Group 3, Ann (7), Tim (4) and Bob (4) start task 1. Bob and Ann begin to look carefully. Tim sprints off but is not actually looking for anything. There is no communication between Bob and Ann. Bob tries to

get Tim to join in which he does. They go to Ann. She doesn't even look at them. Bob and Tim begin running around the yard not searching. Ann says, "Miss we can't find anything!" The teacher tells them to look around the edges of the walls. Ann does so. The boys continue of task until the teacher tells them to look properly. Ann finds one and tells the teacher. The teacher tells her to show her team. She does so. For task 2 Ann tries to fill the sheet herself. Bob tries to join in. Tim looks around. Ann instructs Bob what to do on his sheet. Ann comes up for help and Bob and Tim begin to talk. Tim starts drawing and is focused whilst Bob remains off task and tries to involve Tim. Bob comes to say he is finished, "Ann drew the snail and I drew the slug". The teacher tells him to draw his own snail. Ann remains introverted. Ann does the talking for her group. Bob states, "I saw a spider but forgot to draw it" Tim is quiet.

Group 4, Donal (8), Kevin (6) and May(5) work together in task 1. The younger ones follow Donal but all are looking. Donal tries to stop Kevin jumping around. In task 2 they all work individually and quietly at first. Kevin goes to get something out of his bag and knocks Tony over. Tony begins to cry. Kevin apologises. Kevin returns to his seat and it isn't long before he starts poking Donal's head. Donal ignores him. Kevin talks into his face. Donal still ignores him. Kevin returns to work. He then pokes at Donal's pencil and starts bashing it then flicks it across the floor. This happens twice before Donal says, Kevin if you do that one more time..." The teacher has to intervene as Donal is getting agitated. Ann says, "Kevin is annoying Donal". Kevin returns to task momentarily but messes quietly soon after. All three have plenty to say in task 3.

Group 5, John (7), Tom (6) and Mags (4) begin task 1 with John bossing them, "This way! This way! C'mon!" They follow but then Tom says, "I've got an idea!" John and Mags follow him. Tom is animated. They continue with great team involvement. They are all focused for task 2 also. John explains to Mags what to do. They are very quiet especially Tom. Mags comes for spellings. They all have plenty to say in task 3.

Group 6, Pat (8), Jack (6) and Eve (5) do task 1. Eve follows Pat. Jack goes off on his own. Jack finds something immediately and the others join him. Jack, "I found a big huge snail". Pat and Eve state later that, "We've got ours Miss". Pat talks to Eve and Jack about task 2. All are focused. Jack begins to focus on group 1 who are beside him and goes off task for a time. Later he is focused and wants to draw extra things. For task 3 Pat tells Jack what to say and adds bits. Eve lets them do the talking and then chirps at the end, "I found a bee".

Analysis of task 1:

Actively searching= animated and involved

Passively looking=Not making a real effort to find anything but appearing to look.

Off task completely= no effort at searching.

Name	Actively searching	Passively Looking	Off task completely
Group 1			
Tara	✓		
Chris	✓		
Lara		✓	
Group2			
Jen	✓		
Ellen	✓		
Tony	✓		
Group 3			
Ann		✓	
Tim			✓
Bob			✓
Group 4			
Donal	✓		
May		✓	
Kevin	✓		
Group 5			
John	✓		
Tom	✓		
Mags		✓	
Group 6			
Pat	✓		
Jack	✓		
Eve	✓		

Participation in task 2 (worksheets):

✓ = participation

Name	Sheet	Drew	Comment
Group 1			Tara has written sentences on the infant sheets for them to join up.
Tara	✓		Neat and but incomplete.
Chris		✓	Complete.
Lara		✓	Complete.
Group 2			Jen has divided the infants' sheets into two for them.
Jen	✓		Detailed but incomplete.
Ellen		✓	Good drawings. Jen has written the names on the sheets for her.
Tony		✓	Completed and accurate. No names.
Group 3			
Ann	✓		Good effort. Incomplete.
Tim		✓	Good effort and coloured.
Bob		✓	Messy. Bob has tried to copy Tim and scribbled on his sheet.
Group 4			
Donal	✓		Excellent. Completed accurately.
Sue		✓	Excellent. Completed accurately.
Kevin		✓	Excellent. Completed accurately.
Group 5			
John	✓		Excellent. Completed accurately.
Tom		✓	Tom has wasted time doing his name in dots firstly. Picture missing details but good effort.
Mags		✓	Excellent. Labelled also.
Group 6			
Pat	✓		Excellent. Completed accurately.
Jack	✓		Excellent. Completed accurately.
Eve	✓		Excellent. Completed accurately.

Table showing participation in task 3:

Name	Much participation	Little participation	No participation
Group 1			
Tara	✓		
Chris		✓	
Lara		✓	
Group 2			
Jen	✓		
Ellen	✓		
Tony			✓
Group 3			
Ann	✓		
Tim			✓
Bob		✓	
Group 4			
Donal	✓		
Sue	✓		
Kevin	✓		
Group 5			
John	✓		
Tom	✓		
Mags	✓		
Group 6			
Pat	✓		
Jack	✓		
Eve		✓	

## Lesson 16 - Minibeast collection

Question time was asking the children to relate what they found or did in the last lesson. The following are the children who did not respond:

Chris. Lara puts her hand up but does not say anything.

All senior infants respond.

Ann.

### Evidence from video clips and teacher observation:

In the 1<sup>st</sup>/2<sup>nd</sup> group six children were present- Pseudonyms- Donal-8, Pat-7, John-7, Tara-8, Ann-7 and Jen-6. Junior infants - Six children were present at this group, two girls and four boys. Mags-4, Lara-4, Chris-4, Bob-4 Tony-5 and Tim-4. Senior Infants- Six children were present, three girls and three boys. Tom-6, Jack-6, Kevin-6, Ellen-6, Eve-5 and Sue-5.

The children were grouped by gender and roughly intelligence similar. Task 1 was to go outside in their groups and find at least two minibeasts and collect them using a pooter and/or a bug viewer. Task 2 was to come indoors and draw these and also fill out a worksheet.

Group 1 includes Tara (8), Eve (5), Mags (4) and Lara (4). They set off outside as a group, mainly following Tara. Tara comes to show the teacher litter she has collected. All are on task and talking with each other. For task 2 Tara takes the lead filling out the worksheet. She involves them all in the questions. They focus their attention on Tara. Mags jumps when she thinks a bug has escaped. Lara screams loudly and dissolves into giggles. Tara wants to draw dots for the younger children. She describes, in detail, how to draw a beetle.

Group 2 has Donal (8), Jack (6) and Tony (5). Donal sets off telling the others they have to follow him as Tony starts to veer away. They are very focused and animated about the task. Tony complains that he hasn't got a go with the pooter. Indoors Donal comes up to ask about the sheet. Then Jack asks what he should do, quite a while after the beginning of the lesson. They remain on task. Donal instructs Tony on colour etc. of the minibeasts.

Group 3 is Ann (7) and Ellen (6). Before setting off Ann nervously asks, "Do we open the wee box thing?" Ellen follows Ann. Ann comes to tell the teacher that they can't find anything. The teacher tells them a place to look. They find one but are afraid to use the pooter or trap it. Jack offers to do it but the teacher gets Tony to suck it up for them. The

girls giggle. Ann stands well back and will not look. He drops it and they giggle again. At the finish they have no minibeasts so the teacher asks others to find them a few. Inside they work happily. Ann is up regularly for spellings and guidance. There is not much communication between them. We have a small break in the mid-lesson Ann does not want one. She wants to continue.

Group 4 is Jen (6) and May (5). May follows Jen outside holding the tub at a safe distance. Both watch group 2. Eventually Jen tries to retrieve a slug. May comes to the teacher, "Look watch Jen is doing. Ugggg!" May will not open the pot when Jen is ready. In task 2 the girls work quite separately. Jen comes to complain that May says she can't draw a slug. She tries then she even lifts the tub to get a closer look. Jen comes with a question about the sheet. No other communication between them.

Group 5 is Pat (8), Chris (4) and Tom (6). The group follows Pat but all are actively involved. Tom tells group about seeing a bumble bee despite being advised against this. The teacher intervenes and tells them not to collect it. Pat comes with a question about task 2. He returns and he and Chris work together to complete worksheet. Tom starts to mess with pooter. He persists and now Chris goes off task to watch him. Pat continues working. The teacher removes the pooter and Tom begins. Pat complains that Tom tried to kill the bug by shaking it.

Group 6 is John (7), Kevin (6), Tim (4) and Bob (5) before starting the task John asks for the ground rules, "Aren't you not allowed to go up the ramp?" He then leads the group. They remain together on task. Bob and Kevin appear calm. Tim leaves group but continues to try to find a bug. In task 2 it takes a while for this group to settle. When they do John, Bob and Tim show interest in completing the sheet whilst Kevin messes distractingly with the pooter. The teacher has to take it from him. Later Kevin messes in front of the video. He then resorts to making strange noises. Next he pushes Bob who ignores him. Kevin gives him his chair as Bob has been standing. After that Kevin is more settled.

Analysis of task 1:

Actively searching= animated and involved

Passively looking=Not making a real effort to find anything but appearing to look.

Off task completely= no effort at searching.

Name	Actively searching	Passively Looking	Off-task completely
Group 1			
Tara	✓		
Eve	✓		
Mags	✓		
Lara		✓	
Group2			
Donal	✓		
Jack	✓		
Tony	✓		
Group 3			
Ann		✓	
Ellen		✓	
Group 4			
Jen	✓		
May		✓	
Group 5			
Pat	✓		
Tom	✓		
Chris	✓		
Group 6			
John	✓		
Kevin	✓		
Bob	✓		
Tim	✓		



Participation in task 2 (worksheets):

✓ = participation

Name	Sheet	Drew	Comment
Group 1			Tara has written sentences on the infant sheets for them to join up. Tara has included all their names.
Tara	✓		Neat and complete.
Eve		✓	Accurate and complete.
Mags		✓	Accurate and complete.
Lara		✓	Accurate and complete.
Group 2			Team name included.
Donal	✓		Detailed, accurate and complete.
Jack		✓	Accurate drawings. Jack really interested.
Tony		✓	Completed and accurate.
Group 3			
Ann	✓		Good effort. Complete.
Ellen		✓	Good drawings. Fairly accurate.
Group 4			
Jen	✓		Excellent. Completed accurately. Very detailed.
May		✓	Excellent. Completed accurately. Also very detailed.
Group 5			Team named.
Pat	✓		Excellent. Completed accurately. Very detailed.
Tom		✓	Picture missing details but good effort.
Chris		✓	Good. Team named.
Group 6			
John	✓		Excellent. Completed accurately. Good detail in writing.
Kevin		✓	Not detailed.
Bob		✓	Good effort. Neat.
Tim		✓	Inaccurate drawing.