

APPENDICIES

Appendix 1.1

The Leuven Scale for Involvement

Level	Well-being	Signals
1	Extremely low	Activity is simple, repetitive and passive. The child seems absent and displays no energy. They may stare into space or look around to see what others are doing.
2	Low	Frequently interrupted activity. The child will be engaged in the activity for some of the time they are observed, but there will be moments of non-activity when they will stare into space, or be distracted by what is going on around.
3	Moderate	Mainly continuous activity. The child is busy with the activity but at a fairly routine level and there are few signs of real involvement. They make some progress with what they are doing but don't show much energy and concentration and can be easily distracted.
4	High	Continuous activity with intense moments. They child's activity has intense moments and at all times they seem involved. They are not easily distracted.
5	Extremely high	The child shows continuous and intense activity revealing the greatest involvement. They are concentrated, creative, energetic and persistent throughout nearly all the observed period.

Appendix 1.2

Observation checklist For the identification of pupil engagement in relation to peer assessment Date of observation : Time of peer assessment :
Name :
D.O.B :
Age:
Background :
Lesson / subject :
Note of instructions given :

Scale for involvement	First 10 minutes	+ 10 minutes	+10 minutes	+ 10 minutes	+ 10 minutes	+ 10 minutes
Extremely low						
Low						
Moderate						
High						
Extremely high						

Appendix 1.3



Focused Group Interview Questions

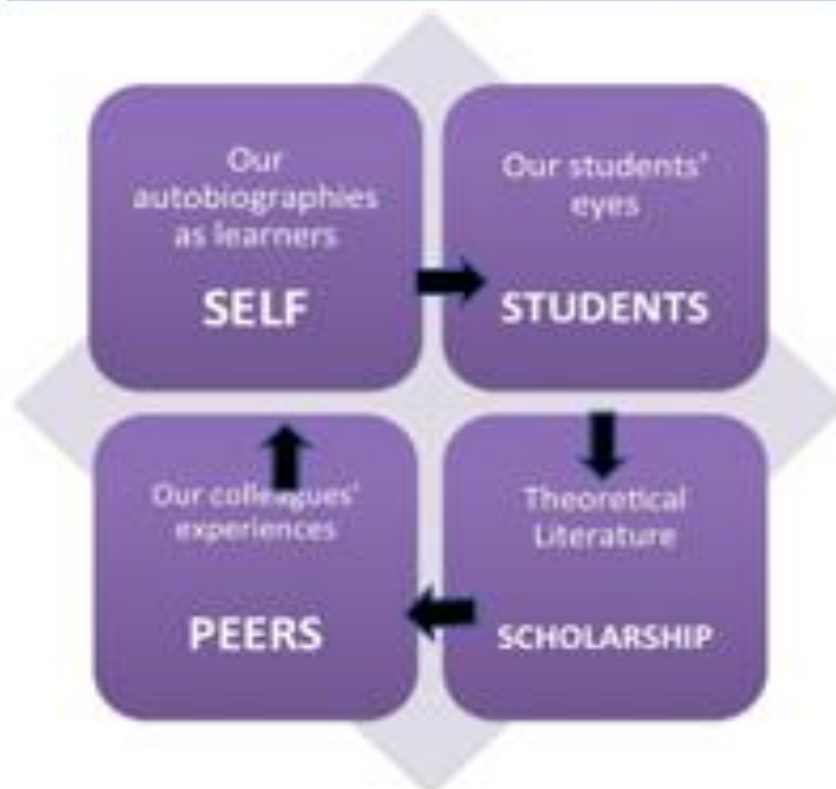
Focused Group Interview Questions



1. Can you explain to us your success criteria for today's lesson and do you feel you met it?
2. What did you think of having the peer assessment mid/at the end of the lesson?
3. Does peer marking make you feel more involved with your learning?
4. How do you feel peer marking helps you in lessons?
5. On a scale of 1-5 (provide scale) how involved did you feel with today's lesson?
6. Where there any points during the lesson that you felt distracted? why was this?
7. Is there another technique of peer assessing that you would prefer?
8. How busy did you feel during the lesson?

Appendix 1.4

BROOKFIELD'S 'FOUR LENSES' REFLECTIVE MODEL (1996) WITH REFERENCE TO GIBBS' REFLECTIVE CYCLE (1988)



REFLECTION QUESTIONS FOR THE 'SELF LENS'

-
- *What happened?*
 - *What were you thinking and feeling?*
 - *What was good and bad about the experience?*
 - *What else can you make of the situation?*
 - *What else could you have done?*
 - *If it rose again what would you do?*
-

Appendix 1.5

[illegible]

 University of Western Australia Faculty of Business PBS1-P1-P0000 1. Title and aims of the presentation, please give an overview 2. List of authors and affiliations (if any)	 University of Western Australia Faculty of Business PBS1-P1-P0000 3. Abstract (max 200 words) 4. Introduction (max 200 words) 5. Methods (max 200 words) 6. Results (max 200 words) 7. Discussion (max 200 words) 8. Conclusion (max 200 words) 9. Acknowledgements (max 200 words) 10. References (max 200 words)	 University of Western Australia Faculty of Business PBS1-P1-P0000 11. Summary of the presentation (max 200 words) 12. Key findings (max 200 words) 13. Implications (max 200 words) 14. Future research (max 200 words) 15. Acknowledgements (max 200 words) 16. References (max 200 words)	 University of Western Australia Faculty of Business PBS1-P1-P0000 17. Summary of the presentation (max 200 words) 18. Key findings (max 200 words) 19. Implications (max 200 words) 20. Future research (max 200 words) 21. Acknowledgements (max 200 words) 22. References (max 200 words)	 University of Western Australia Faculty of Business PBS1-P1-P0000 23. Summary of the presentation (max 200 words) 24. Key findings (max 200 words) 25. Implications (max 200 words) 26. Future research (max 200 words) 27. Acknowledgements (max 200 words) 28. References (max 200 words)
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Appendix 1.6 (my lesson plan)

Canolfan Addysg Athrawon De-Orllewin Cymru  The South West Wales Centre of Teacher Education		1B	
Session Plan – Key Stage 2			
Name of trainee: Bryanie Allsworth		Session ref: 20/02/2019 8 th maths lesson	
Personal target(s) in relation to QTS: S1.4			
Year group: Year 6	No. of learners: 27	ALN: Scott – Needs to always check his results before finalizing them. Gracie – Needs to write her answers in minutes not hours.	
Additional Adults: 0			
Learning objective(s): Use and interpret timetables and schedules to plan events and activities and make calculations as part of the planning process		Success criteria: - I can read the questions and understand what is being asked - I can use the timetables and select the correct information to answer the questions	
Links to previous learning: The children have not yet studied time intervals and timetables this academic year, however, they did cover this on Monday's lesson (18/02/2019)			
Curriculum coverage (range, skills) 1) Use and interpret timetables and schedules to plan events and activities and make calculations as part of the planning process. 2) Estimate how long a journey takes. 3) Identify the appropriate steps and information needed to complete the task or reach a solution. 4) Select appropriate mathematics and techniques to use. 5) Choose an appropriate mental or written strategy and know when it is appropriate to use a calculator.			
Literacy(LNF) - Listen to and carry out instructions given in the introduction and main activities. - Provide appropriate answers to questions.		Numeracy (LNF) N/A – mathematical session	
DCF - Photograph the two activities using the class iPad. - Powerpoint with the Bus Timetable questions.	Thinking -How do I read / collect information off a bus timetable (All of the questions in the main activity)	ESDGC	YCC Rhifau yn Gymraeg, amser, cyfnodau amser, teithiau bws, amserlen trên, amcangyfrif.
Key vocabulary(English/Welsh): Time intervals. Bus journeys. Estimate. Train timetable. Amser. Cyfnodau amser. Teithiau bws. Amserlen trên. Amcangyfrif			
Time	Session activities, organisation and management		Key questions & Assessment for Learning opportunities
20mins	Introduction On their white boards, can they work out the 5 mental maths questions? (mental maths questions written on the big white board) Interactive whiteboard - 30 maths starters' websites. Activity A2 = 'Harry the hedgehog' (Children work answer out on their white boards. Have a small discussion on time intervals. 1) Do the children understand the meaning of time intervals? 2) What do they remember about time intervals from the previous lessons? 3) How did they work out time intervals in the previous		 Assess the children's understanding in the introduction through questions and answers.  AFL: Use 'dojo' to select a random name and provide an answer to the questions.

	lessons? Get the children to read the questions on the powerpoint and work out the answers using their white boards. Ask some children to feedback to the class on how they calculated the answers.	
60mins	<u>Main activities</u> <u>Whole class</u> *PROVIDE THE CHILDREN WITH A HAVERFORDWEST – TENBY BUS TIMETABLE* Using the bus timetable provided, the children need to complete the work sheet about bus times. On the worksheet will be a small description of Miss Allsworth, explaining where she lives and works. Unfortunately Miss Allsworth does not drive, therefore needs to catch a bus to work every day. Work hours will be provided in the information. 1) How long does Miss Allsworth work for every day? How long does she work during a working week? 2) Which bus should Miss Allsworth catch to get to work on time? 3) What bus should Miss Allsworth catch after work to get home and what time will she get back? 4) In total, how long does Miss Allsworth spend on the bus each day? 5) In total, how long does Miss Allsworth spend on the bus and in work every day? What about during a working week? Need to remind Scott to always check his results before finalizing. Gracie needs to write her answers in minutes not hours (this applies to a few children) <u>Extended activity</u> Complete the train timetable activity on the big screen, answer the questions that are underneath the timetable (advise the children to read the timetable carefully, this will prevent small / silly mistakes) After the children have completed the work sheet (if they haven't finished, stop them anyway to peer assess) The children need to peer assess their friends work and compare answers and how they worked out each answer using the 'feedback sandwich' strategy' – the children must swap books with their partner and study how they have completed the work. Providing written feedback containing: 1) Positive comment 2) Negative (feed forward) (feed forward dice sheet,	 The use of the activity in the main activities will allow assessment for understanding in smaller groups <u>Questions:</u> 1) Can you give me a positive comment? 2) Can you give me a feed forward comment? 3) What made you decide decide on these comments? 4) How could you complete this activity differently next time? 5) Do you understand how to collect data from a bus timetable?

	number 3) “If you did this again how would you do it differently?” (get the children to suggest a different way to their peers) 3) Positive comment	
10mins	<u>Plenary</u> List 3 things that you learnt today. Children have to turn to their partner and list three things that they learnt from the lesson. They need to rank their list from the most to least difficult. After 60 seconds, they have to swap! Ask some groups to feedback to the whole class.	✚ The use of the activity in the plenary will allow assessment for understanding ✚ AFL: Use 'dojo' to select a random name and provide feedback to the whole class.

Appendix 1.7 (child 1, high ability)

Bus times tables

 Success Criteria Maths – Bus Timetables LO – Use and interpret timetables and schedules to plan events and activities and make calculations as part of the planning process		Green (Yes) Orange (Almost) Red (Not quite)		
I can read the questions and understand what is being asked	☒	O	R	
I can use the timetables and select the correct information to answer the questions	☒			
I think ... Good time bus tables. Show workings out. thinks: Good counting skills.				
Miss Allsworth thinks... Well done. Good effort. Can you go back and check some of your answers?				

s Allsworth lives in Johnston but works in Tenby, unfortunately she doesn't drive and has to catch a bus to work every day. She starts work at 09:30 and finishes at 17:30. She has two 10-minute breaks and a half an hour lunch.

Appendix 1.8 (child 2, high ability)

Bus Times Tables

 Success Criteria Maths - Bus Timetables		Green (Yes) Orange (Almost) Red (Not quite)		
LO - Use and interpret timetables and schedules to plan events and activities and make calculations as part of the planning process				
I can read the questions and understand what is being asked		G/	O	R
I can use the timetables and select the correct information to answer the questions		✓		✓
I think... [REDACTED] thinks you have worked well. Not time explain your answers.				
Miss Allsworth thinks... Well done. Really good effort. Can you go back and check question 5?				

Miss Allsworth lives in Johnston but works in Tenby, unfortunately she doesn't drive and has to catch a bus every day. She starts work at 09:30 and finishes at 17:00. She has two 10-minute breaks and a half an hour lunch break.

1) How long does Miss Allsworth work for every day? How long do

Appendix 1.9 (child 3, middle ability)

Bus Timetables

 Success Criteria Maths – Bus Timetables		Green (Yes) Orange (Almost) Red (Not quite)		
LO – Use and interpret timetables and schedules to plan events and activities and make calculations as part of the planning process				
I can read the questions and understand what is being asked		G	O	R
I can use the timetables and select the correct information to answer the questions				
I think... you could leave bigger gaps. [redacted] thinks... If I did it differently I would try to do it on again. Its neat.				
Miss Allsworth thinks... Well done. Really good effort. Can you go back and check question 2?				

Allsworth lives in Johnston but works in Tenby, unfortunately she doesn't drive and has to catch a bus to work every day. She starts work at 09:30 and finishes at 17:30. She has two 10-minute breaks and a half an hour lunch break.

How long does Miss Allsworth work for every day? How long does she work during a working week?

Which bus should Miss Allsworth catch to get to work on time?

What bus should Miss Allsworth catch after work to get home and what

Appendix 2.0 (child 1, high ability)

Observation checklist For the identification of pupil engagement in relation to peer assessment Date of observation : Time of peer assessment :	
Background: <i>High ability</i>	
Lesson / subject: <i>Maths - Time intervals</i>	
Note of instructions given : • Reading a bus timetable to find information which will answer time interval questions.	

Scale for involvement	First 10 minutes	+ 10 minutes	+10 minutes	+ 10 minutes	+ 10 minutes	+ 10 minutes
Extremely low						
Low			✓			
Moderate	✓				✓	
High		✓		✓		✓
Extremely high						

Appendix 2.1 (child 2, high ability)

Observation checklist For the identification of pupil engagement in relation to peer assessment	
Date of observation : Time of peer assessment :	
N D A	)
Background: High ability	
Lesson / subject: Maths - Time intervals	
Note of instructions given : • Reading a bus timetable to find information which will answer time interval questions.	

Scale for involvement	First 10 minutes <i>Hook</i>	+ 10 minutes <i>carpet</i>	+10 minutes	+ 10 minutes	+ 10 minutes	+ 10 minutes
Extremely low			✓		✓	
Low						
Moderate		✓				✓
High	✓			✓		
Extremely high						

Appendix 2.2 (child 3, middle ability)

Observation checklist For the identification of pupil engagement in relation to peer assessment	
Date of observation : Time of peer assessment :	
Background: <i>Middle ability</i>	
Lesson / subject: <i>Maths - Time intervals</i>	
Note of instructions given : <i>• Reading a bus timetable to find information which will answer time interval questions</i>	

Scale for involvement	First 10 minutes	+ 10 minutes	+10 minutes	+ 10 minutes	+ 10 minutes	+ 10 minutes
Extremely low			✓			
Low						
Moderate		✓		✓	✓	
High	✓					✓
Extremely high						

Appendix 2.3 (research partners lesson plan)

Canolfan Addysg Athrawon De-Orllewin Cymru  The South West Wales Centre of Teacher Education			1B	
Session Plan – Key Stage 2				
Name of trainee: Naomi Pattinson			Session ref: Whole Class Maths- Data	
Personal target(s) in relation to QTS: S3.1 Teaching, Planning, Expectations and Targets.				
Year group: 5&6	No. of learners: 31	ALN: Differentiated worksheets		
Additional Adults:		N/A		
Learning objective(s): - Convert between metres and kilometres - Know approximate conversion between miles and km - Draw a line graph and read intermediate points			Success criteria: - I know approximate conversion between miles and km. - I can draw line graphs and read intermediate points.	
Links to previous learning: Data handling				
Curriculum coverage (range, skills)				
<u>Mathematics</u> - Use the language of imperial units in daily use, e.g. miles, pints (Year 6) - Read, plot and write coordinates in one quadrant, e.g. (2, 4) (Year 5) Represent data using graphs (Year 5 & 6) - Refer to the x axis and the y axis (Year 6)				
Literacy (LNF) contribute to group discussion, taking some responsibility for completing the task well, e.g. introducing relevant ideas, summing up (Year 5)		Numeracy (LNF) N/A mathematics session		
DCF Mathletics (shape and space)	Thinking Using information and understanding.	ESDGC Using the mapping tool to locate and mark local places in their town on their maps.	YCC The use of incidental Welsh.	
Key vocabulary (English/Welsh): - Origin - Axes - Kilometres - Miles - Horizontal - Vertical - Estimate - Mapping				
Time	Session activities, organisation and management			Key questions & Assessment for Learning opportunities
9.15-9.30	Introduction - Does anybody know what 5 miles is in km? write on your whiteboards. - Remind the children that distance signs in the UK are shown in miles. Do we know any countries that use KM? - Remind children that a mile is longer than a KM. - Write on the board that '5 miles is approx 8km' - Ask how many km is the same as 10 miles (16km)? 15miles (24km)?			<u>QUESTIONING</u> - Open ended questions - Differentiating the levels of the question for the ability of the learners. - Use "What if?" style questions

	• Write the answers as a chart. Ask them if they know of any way we can represent this data? A graph. • Next show them a blank squared background on the IWB. • Show the children how we draw the axes. Horizontal labelled 'Miles. Vertical labelled 'Kilometres'. • Then introduce labelling. Explain that the KM will go up in 2's and that the miles will go up in 5's. • Collectively as a class plot the results onto the graph. • If the understanding is there, explain to the children how we can read off intermediate points. E.g. 2.5 miles.	<u>AFL</u> • Peer assessment mid lesson
9.30-10.15	Main activities (20 minute rotation) • Independent task- Mathletics- Representing Data • Worksheet on plotting and interpreting data • Sheets are differentiated depending on ability/support level needed. • Extra challenge- To create their own graph, labelling the axis correctly and plot the information provided. They need to answer the questions based upon their graph	
10.15-10.25	Plenary • Half way through the lesson I will stop the class and they will swap work with their partner. They will peer mark each other's work based upon the success criteria in their books. They will then need to provide sandwich feedback (written) for their partner. We will then reflect upon the feedback and continue.	

Appendix 2.4 (research partner's child 1, year 6 high ability)

Observation checklist For the identification of pupil engagement in relation to peer assessment Date of observation : Time of peer assessment :						
Background : H.A (Year 6)						
Lesson / subject : Maths - Data Representation						
Note of instructions given : Plotting information onto graphs and reading at intermittent points.						

Scale for involvement	First 10 minutes	+ 10 minutes	+10 minutes	+ 10 minutes	+ 10 minutes	+ 10 minutes
Extremely low						
Low						
Moderate	✓		✓	✓		
High					✓	
Extremely high		✓				✓

Appendix 2.5 (research partner's child 2, year 6 low ability)

Observation checklist
For the identification of pupil engagement in relation to peer
assessment

Date of observation :
Time of peer assessment :

Background : L.A (Year 6)

Lesson / subject : Maths - Data Representation.

Note of instructions given :

Plotting information onto graphs and
reading at intermittent points.

Scale for involvement	First 10 minutes	+ 10 minutes	+10 minutes	+ 10 minutes	+ 10 minutes	+ 10 minutes
Extremely low						
Low						
Moderate		✓	✓	✓		
High	✓				✓	
Extremely high						

Appendix 2.6 (research partner's child 3, year 5 high ability)

Observation checklist
For the identification of pupil engagement in relation to peer assessment

Date of observation :
Time of peer assessment :

[Redacted]

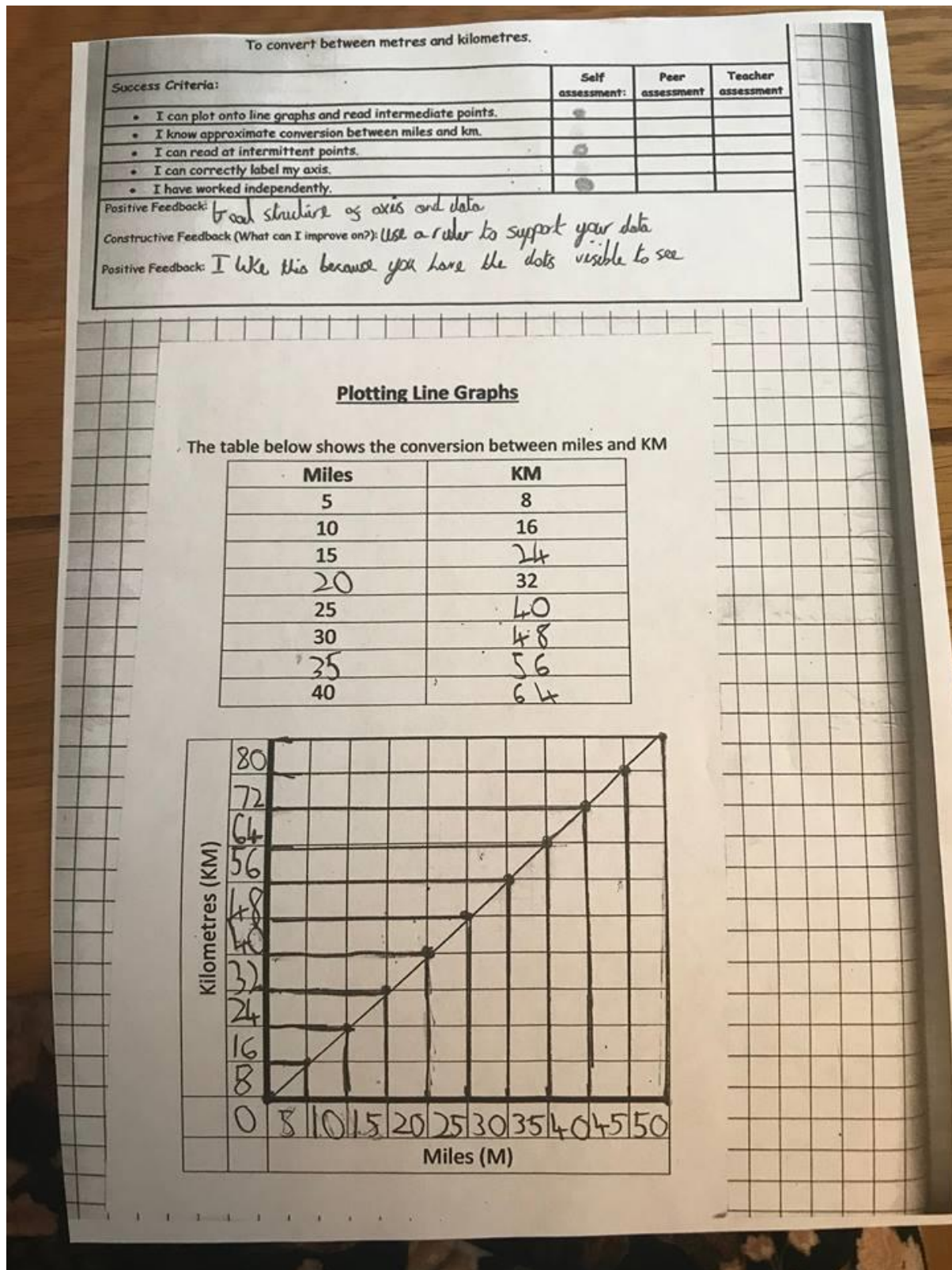
Background : M.A (Year 5)

Lesson / subject : Maths - Data Representation

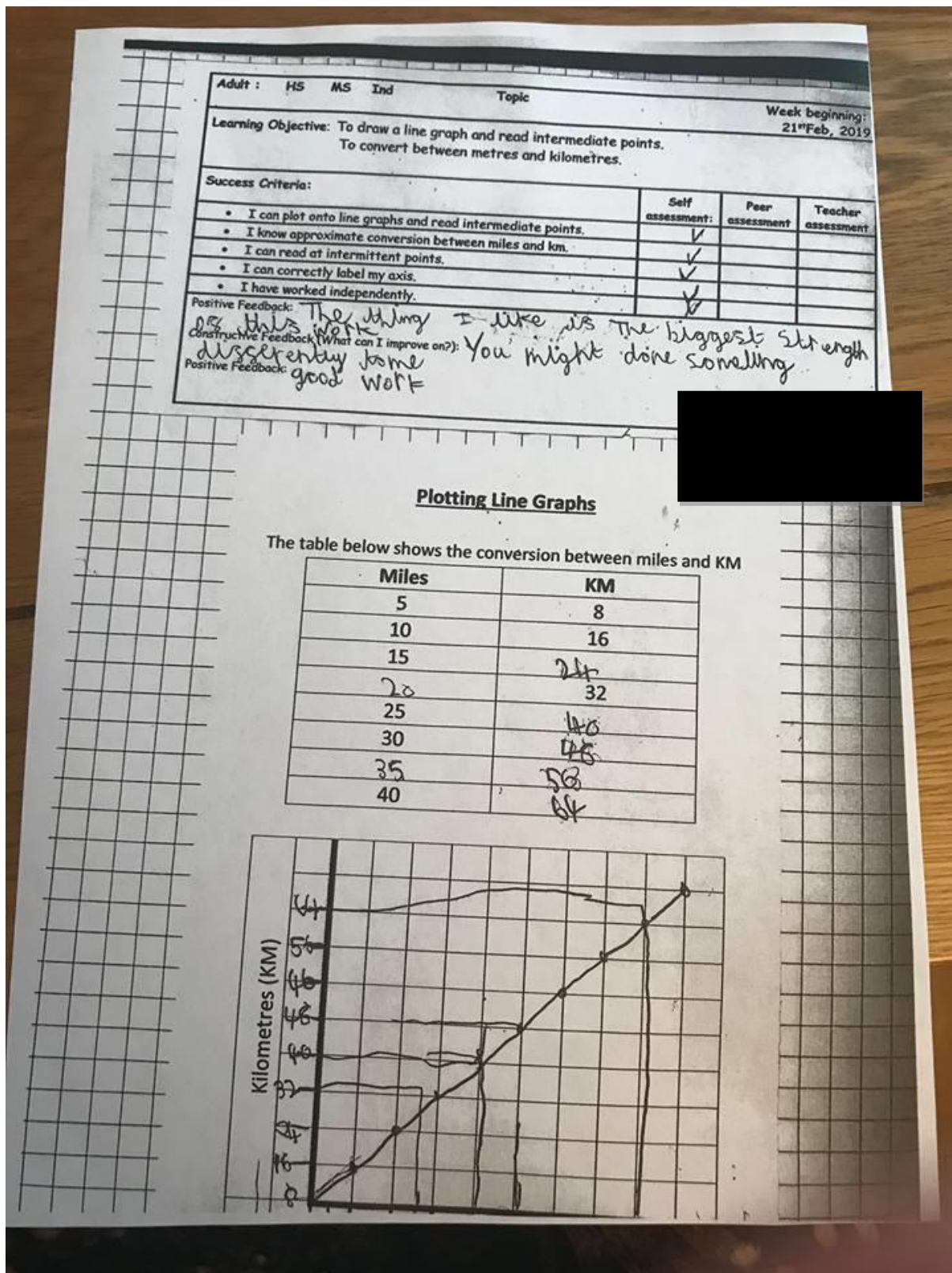
Note of instructions given :
Plotting information onto graphs and reading at intermittent points.

Scale for involvement	First 10 minutes	+ 10 minutes	+10 minutes	+ 10 minutes	+ 10 minutes	+ 10 minutes
Extremely low						
Low						
Moderate						
High	✓			✓		
Extremely high		✓	✓		✓	✓

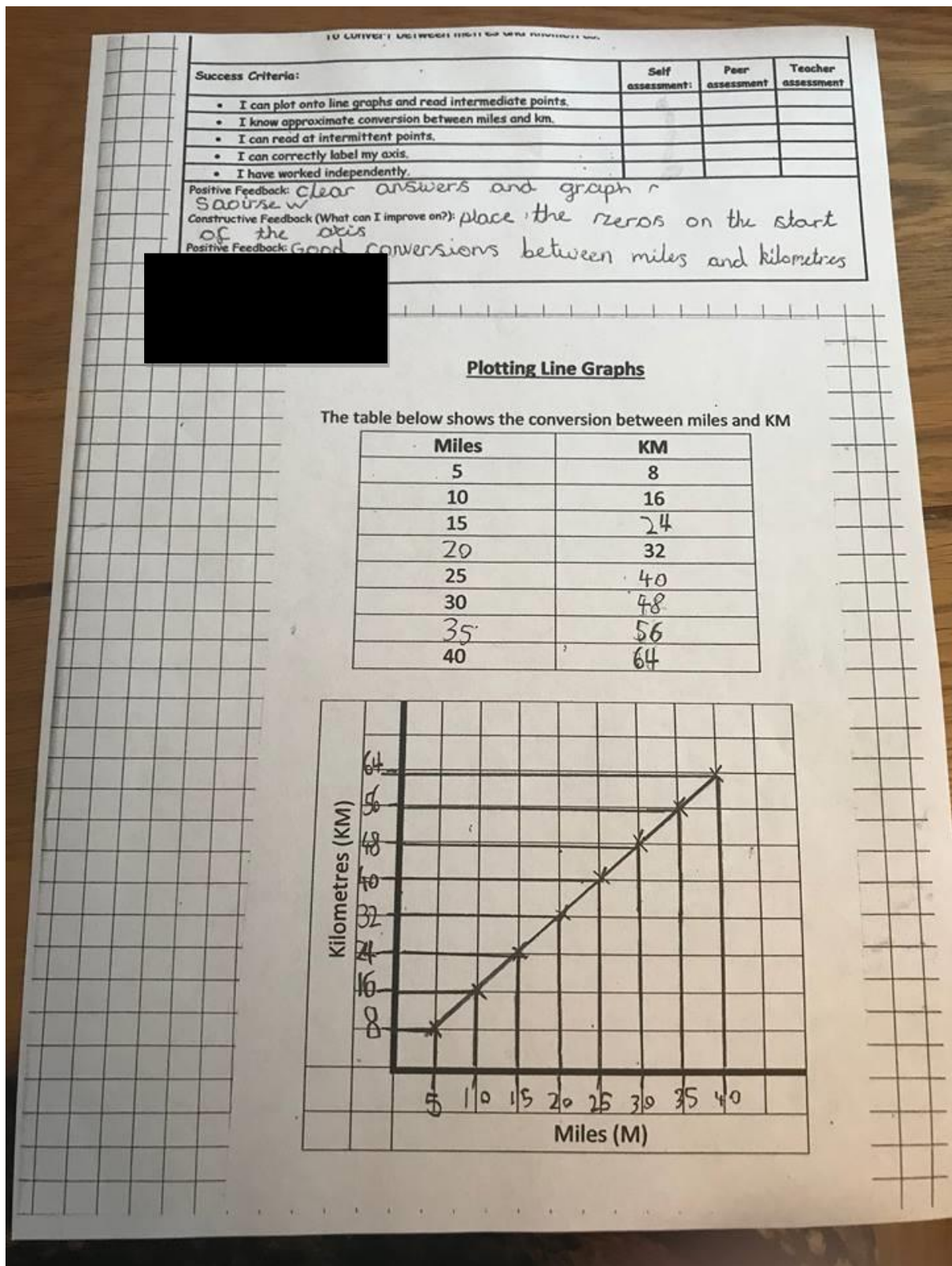
Appendix 2.7 (research partner's child 1, year 6 high ability)



Appendix 2.8 (research partner's child 2, year 6 low ability)



Appendix 2.9 (research partner's child 3, year 5 high ability)



Appendix 3.0

Assent

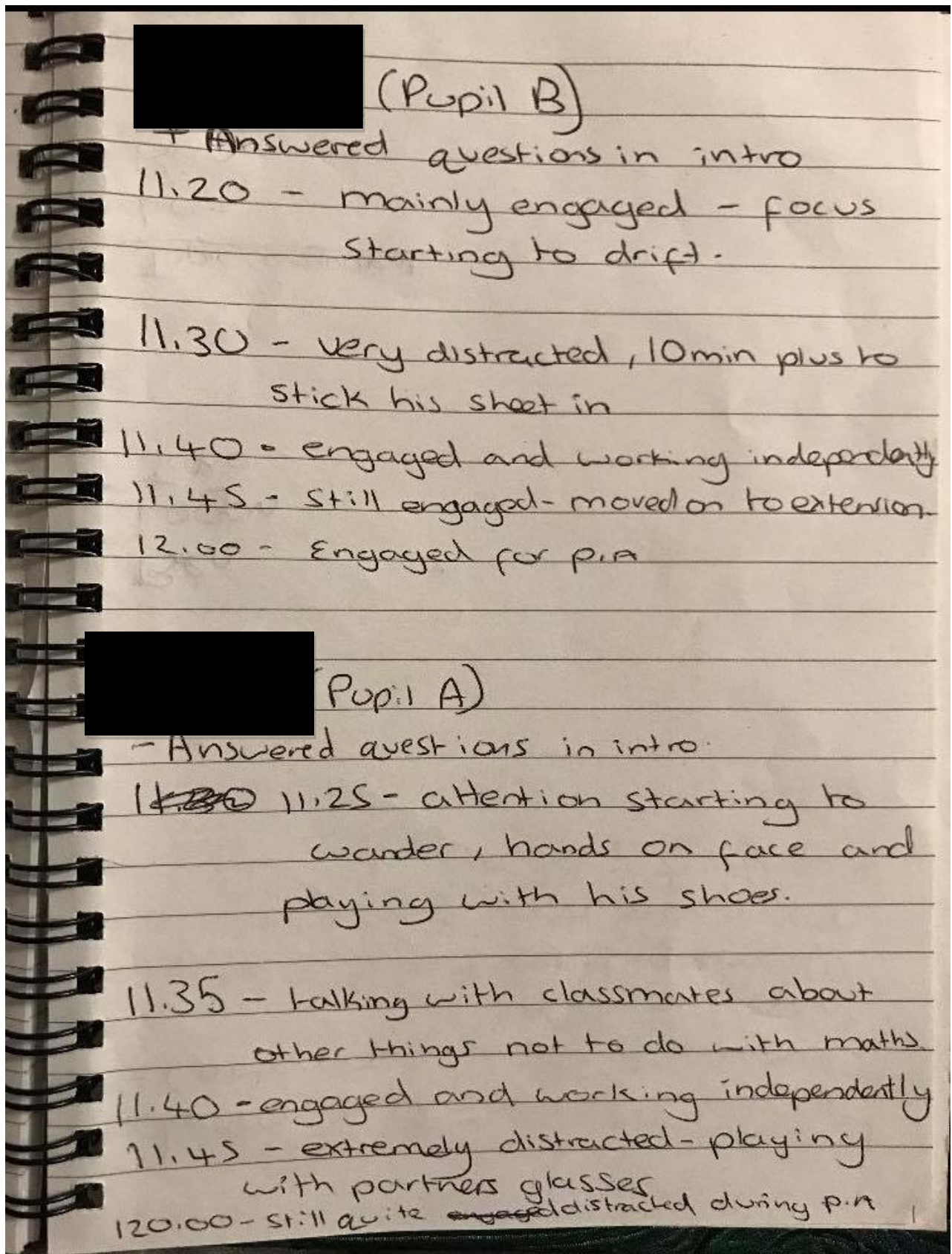
Myself and my research partner are doing a research study about whether the time at which peer assessment is carried out during a lesson has an effect on student engagement. Peer assessment is carried out in the classroom, and involves students providing feedback on their peer's piece of work.

To carry out our research, we will be focusing on three target children during one lesson. The whole class will be involved in the lesson, however, only the three targeted children will be observed. After the lesson has taken place the three target children will take part in a group interview, conducted by myself alongside my research partner and classroom teacher who will also be present. During the interview, the three target children have the right to withdraw at any time from the research for any or no reason.

You do not have to be a part of this research project if you do not want to be. If you decide to take part in the project and then decide you want to withdraw half way through, you have every right too. If you would like to take part in this project, all you need to do is verbally assent to this form. Your parents have also received a consent form regarding information about our research project.

Thank you.

Appendix 3.1 (Child 1 and Child 2)



[REDACTED] (PUPIL C).

11.20 - Started to become distracted, looking around the classroom and at the floor

11.30 - walking around the classroom looking for a gluestick. - now playing with the gluestick.

11.40 - Settled into work with partner

11.45 - Swinging on chair, talking to somebody who isn't his partner

11.50 - engaged, sat still & working collaboratively.

11.55 - walking around the class again talking to another student (non work related).

12.00 - slightly more engaged - for short spans

12.00 - Really engaged for peer assessment