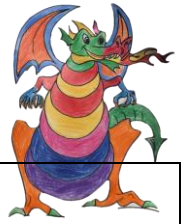
At this stage, group work will be used to share ideas throughout, but all aspects of the investigation need to be explained in scientific detail in books. Teachers must use this as a guide to prompt. If using sentence starters as a writing frame, personalise to align with your investigation and your groups of learners. Scientific vocabulary is key at this level to show understanding and application. Please remember HAKA.

Link to HAKA	Teacher Guide	Child Prompts	Recording
Hook - This must excite and inspire the learners. Must engage their interest and drive them to want to learn more! Must make question explicit.	Could use dramatic video, multisensory activity, practical, hands on session, a letter to class etc and has a wow factor! (Always use outdoors if possible) Involve children in formulating a question to investigate from the start!	What do you know about this? What questions does this make you think of? What could we try and find out?	<u>Question for Investigation</u> (could be refined later)
Authentic - use materials exposing pupils to high quality text and information from the real world, making their learning relevant beyond the school gates.	Question pupils to draw out key information which will support the investigation. Must focus on key words that will be the focus for research.	What are the important bits of this? What does this tell us? What words are unfamiliar? What do we need to find out more about?	Collaborative document (Either on IT/Board/A3)
Knowledge - Through both teaching and opportunities for research, ensure learners acquire the knowledge and concepts they need to move their learning forward. This must be targeted from the authentic information and to support the investigation or question.	This must be collaborative eg. Collate facts on a class board, or a digital collaborative document. Children can read facts from others not to repeat. (Not copying facts into books) Utilise FLIP learning.	What other facts can you find out? What important words did we hear in the video/read in the book? Where else could you find information? Why will this information help you?	<u>Research</u> I have found out these things about ……..



LLANRHIDIAN SCIENCE PLANNER
PRYCOP 3

		Explain this information with a friend...	
Application - provide the learners with opportunities to apply their knowledge and understanding through planning their investigation, keeping all pupils in their challenge zone. Children should be working collaboratively.	**Planning: What are our success criteria? Discuss the method (No need to record). How will we make this a fair test? What is the independent variable? What ranges will be used? What is the dependent variable? How will this be measured? What are the control variables? Why is this important?** **L6: How will you control the control variables?** **Prediction: What do you think will happen? Explain why you think this using prior knowledge and scientific vocabulary precisely? 2 ER words. Can you link this to the independent and dependent variables?** **Diagram: Can you label all the important parts accurately and precisely? Have you included all the equipment?** **Results: What is the most effective way to record your results?** **Conclusion: What did you notice about the results? 2 ER words. What does this tell us? Can you see a pattern? Are your results accurate? Is there another way your results could have been presented? Where was your biggest change in data? Why was that? Where do you think you may have an anomaly in your results? Why?** **Reflecting: What worked well? What didn't work well? Why? What were your anomalies? What led to them? Was your prediction successful? Have you evaluated each of your success criteria fully? Where could you apply this information in the real world?**	**<u>Planning</u>** To make this investigation successful we need to…… Independent: Change…Dependent: Observe... Control: Keep... **<u>Prediction</u>** I think ….. because **<u>Diagram</u>** **<u>Results</u>** Table and graph **<u>Conclusion</u>** I found out that ……..I think this happened because... **<u>Reflecting</u>** If I did this again I would change … This would improve the investigation because… Against my success criteria I was... because... Reasons for anomalies were...

		The effect this had on the investigation was...

Appropriate Vocabulary and Terminology

Evidence	Organise	Bias	Models
Information	Opinions	Independent Variable	Consistent
Ideas	Changes	Dependent Variable	Views
Findings	Identify	Control Variable	Evaluate
Record	Prediction	Justify	Strategy
Enquiries	Outcomes	Accurate	Appropriate
Observations	Scientific	Progress	Dissimilar
Plan	Fair Test	Relationships	Anomaly
Method	Variables	Reliability	Anomalies
Success Criteria	Conclusions		
Familiar	Decisions