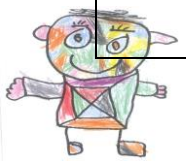
LLANRHIDIAN SCIENCE PLANNER
PRYCOP 2

At this stage , group work will be used to share ideas throughout, but all aspects of the investigation need to be recorded 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. 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 ……..

		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? What are the instructions for our investigation? How will we make this a fair test? What is the independent variable? What is the dependent variable? What are the control variables?** **Prediction: What do you think will happen? (2 ER words) Why do you think that? How can you explain yourself scientifically?** **Diagram: Can you label all the important parts accurately and precicely? 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?** **Reflecting: What worked well? What didn't work well? Why? Were there any anomalies? What were they? Was your prediction successful? Where could you apply this information be used in the real world?**		**Planning** To make this investigation successful we need to…… Independent Variable: We will change… Dependent Variable: We will observe the effect it has on…….. Control Variable: We will keep….the same. **Prediction** I think ….. **Diagram** **Results** Table and graph **Conclusion** I found out that ……..I think this happened because. **Reflecting** If I did this again I would change … This would improve the investigation because……



Appropriate Vocabulary and Terminology

Evidence	Patterns
Information	Trends
Ideas	Facts
Findings	Beliefs
Record	Equipment
Enquiries	Scientific
Observations	Fair Test
Plan	Variables
Method	Conclusions
Success Criteria	Decisions
Familiar	Bias
Organise	Amendments
Opinions	Range
Changes	Similar
Identify	Explain
Prediction	Anomaly
Outcomes	Anomalies