Scargill C of E Primary School

Science – SEND and Disadvantaged

How are children with SEND and disadvantaged children supported by our general structures and procedures within the wider curriculum?

Strategy	Why?
1. **Retrieval practice is used at the start of each lesson.**	Retrieval is the process of recalling information from memory. When we retrieve information from memory, it becomes more stable and less susceptible to forgetting. In other words, retrieval can help strengthen our memory of the material.
2. **Providing opportunities for repetition and rehearsal for example 'Make it Stick!' and checking for understanding following acquisition of new knowledge.**	Rehearsal and repetition of new information is necessary to maintain it in working memory; this can be done by verbalising or writing the information. Practice and repetition are important for the formation of new synapses and the strengthening of neural connections.
3. **Basic, advancing and deep tasks.**	All children should be able to access the basic tasks as a minimum and these provide an opportunity to repeat and rehearse new information; this results in more children retaining new knowledge in the long-term memory.
4. **Composites and components break down the small amounts of knowledge that should be learned within each lesson.**	By limiting the amount of information presented at one time, we can reduce cognitive overload. As John Sweller states, "The human working memory has a limited capacity, and the complexity of the material being learned can exceed this capacity. If this happens, learning will not occur". Components narrow the focus of the curriculum and individual lessons to prevent cognitive overload.
5. **Scaffolding**	The EEF SEND 5-a-day recommends providing supportive tools or resources when students are working on a task. If this were a written task, we might provide a writing frame or a partially completed example to allow children to fully access the learning and complete the relevant learning task.
6. **Metacognitive strategies**	The EEF 5-a-day also advocates the importance of metacognitive strategies for supporting pupils with SEND. By providing opportunities such as 'Make it Stick!' and end of unit assessments, we provide children with the opportunity to monitor and evaluate their own learning.
7. **End of unit assessments**	Taking an end of unit assessment requires children to actively retrieve the information from memory, strengthening the memory trace and making it more durable (the testing effect). Taking a test also provides immediate feedback on what has been learned and what still needs to be learned, allowing teachers to refocus future retrieval tasks.
8. **Personalised support**	Some children will require additional support beyond our general structures and procedures. This level of support will be detailed within a child's SSP, EHCPs and on class provision documents.