



## Holy Trinity Church of England (Aided) Primary School

### ***The Best for Every Child - a Unique Child of God***

#### **Lesson design (from September 2022)**

Lesson design is based around 5 stages:

1. Starter – to improve working memory/recall and reinforce prior learning/revisit earlier skills and knowledge
2. Representation – introduction of new and developing concepts. Teacher-led with pupils participating in discussion and written activities. Pupils establish conceptual understanding. Multiple representations are used to expose structure. Teacher guides and supports the learning. Assessment for learning questions are completed together.
3. Fluency – pupils independently complete questions. Procedural variation expected (*“The basic idea of procedural variation is that keeping some things the same and only varying the important concept or idea that you want your children to focus on, gives a greater likelihood of them understanding that concept or idea.”*)
4. Probing questions (reasoning and problem solving) – pupils independently justify, reason and convince. They can explain their thinking to others and explain typical misconceptions. They can apply their learning to problems in a range of familiar contexts.
5. Deepening learning –pupils independently apply their knowledge in unfamiliar contexts. They devise their own approach to explore problems and reflect on their responses.

Conceptual variation and procedural variation are used throughout teaching to present the mathematics in ways that promote deep, sustainable learning. Carefully devised exercises employing variation are used, providing intelligent practice that develops and embeds fluency and conceptual knowledge.

Precise questioning and open questioning techniques are used by teachers and teaching assistants to continually assess and extend learning.

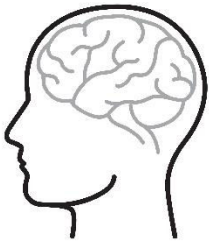
Learning is broken down into small, connected steps, building from what pupils already know.

## Stem sentences used from EYFS to Year 6

1. **Declarative knowledge** can be prefaced with the sentence stem 'I know that' and consists of facts and concepts.
2. **Procedural knowledge** can be prefaced with the sentence stem 'I know how' and consists of a sequence of steps.
3. **Conditional knowledge** can be prefaced with 'I know when' and focuses on strategies to reason and problem solve.

Declarative knowledge: I know that...

Facts and formulae



Procedural knowledge: I know how...

Methods



Conditional knowledge: I know if...

Strategies



On display in all classrooms with these symbols – see large prints