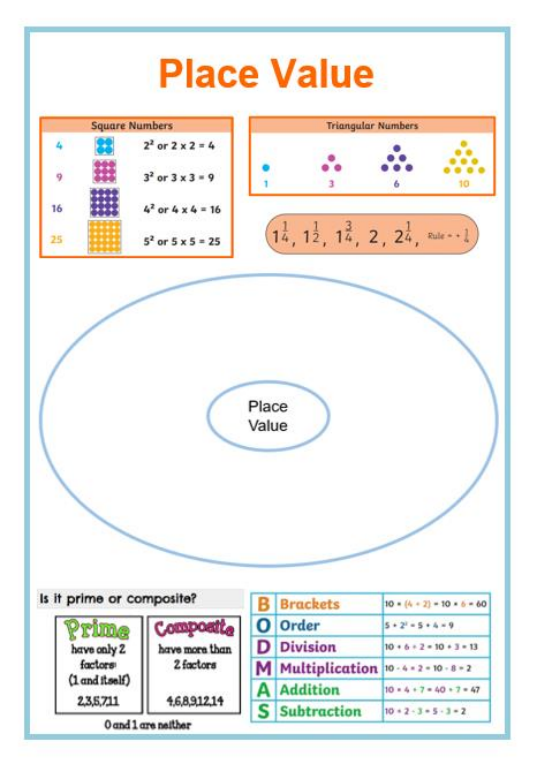
Sequence of lessons for KS1 and KS2 (for each mathematics topic)

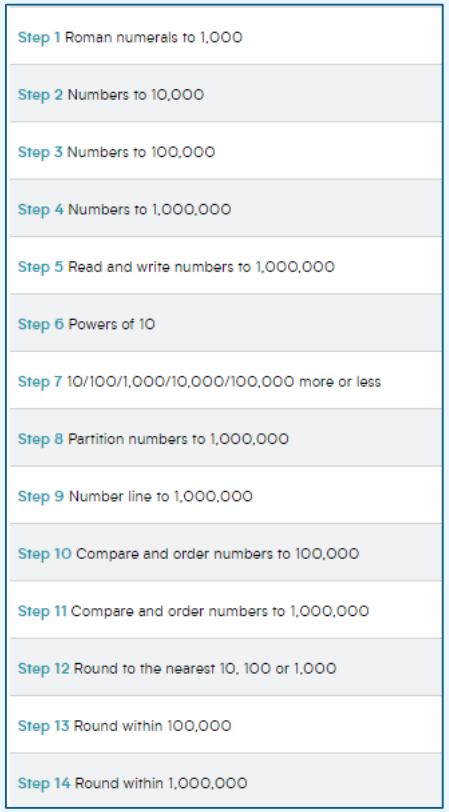
Cover sheet with key knowledge for new topic.
Pupils complete a circle map to identify and discuss key vocabulary linked to the topic (verbal for Y1 in Autumn term).

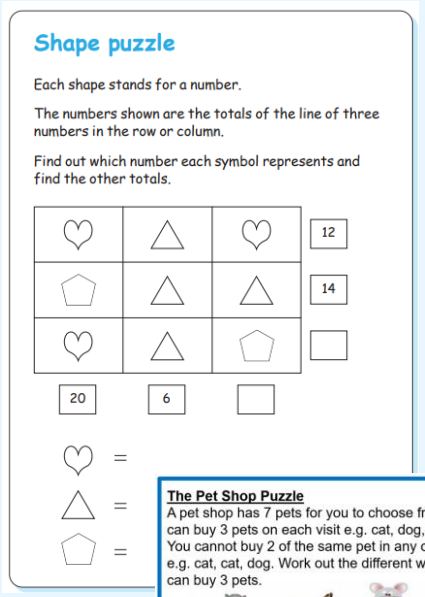
Developing fluency, reasoning and problem solving for each small step in learning.

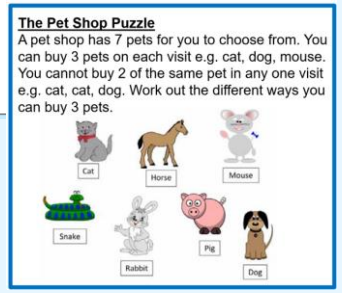
- Arithmetic test every 2 weeks.
- **Non-routine problem-solving every week.**

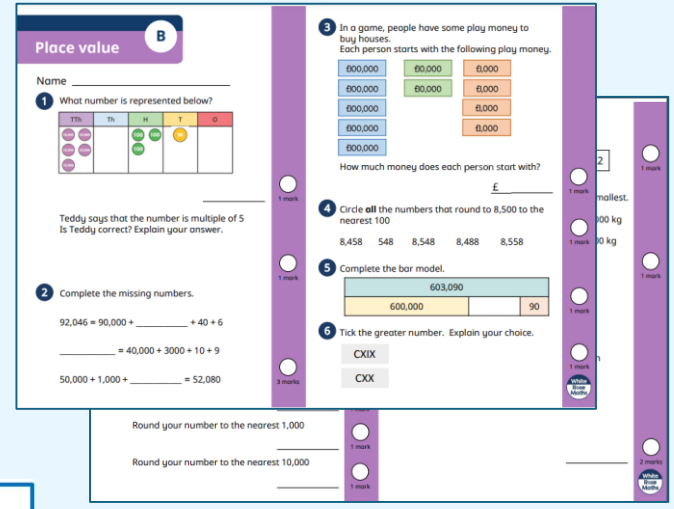
End of topic assessment. Children self-assess their own understanding of the topic.











Big Maths tests completed 3 times per week

What does maths look like in Nursery?

- Strong focus on number.
- Daily practice of counting skills and reciting numbers up to and beyond 5.
- Regular practice with one-to-one correspondence - matching each object to a number, counting each object once, and only once.
- Regular practice with subitising – developing children's ability to look at a small set of objects and instantly know how many there are without counting them.
- Developing children's ability to use mathematical and positional language.

Daily maths meet

Daily rehearsal of vocabulary and number skills linked to:

- Days of the week.
- Months of the year.
- Creating a tally linked to the register.

What does a maths lesson look like in Reception?

Teacher shares the learning objective with children.*

Whole class teaching and teacher modelling

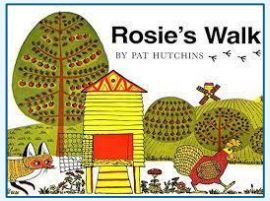
Whole class teaching and teacher modelling.

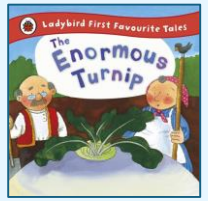
Whole class / group practical activity
Class split into 5 groups: 3 independent; 2 teacher/TA led.

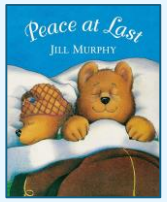
Children complete the task in their books.**

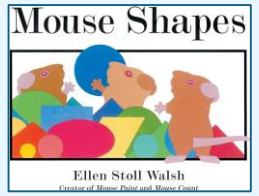
Children are encouraged to access the continuous provision linked to maths learning objective.

Big Maths 3x per week





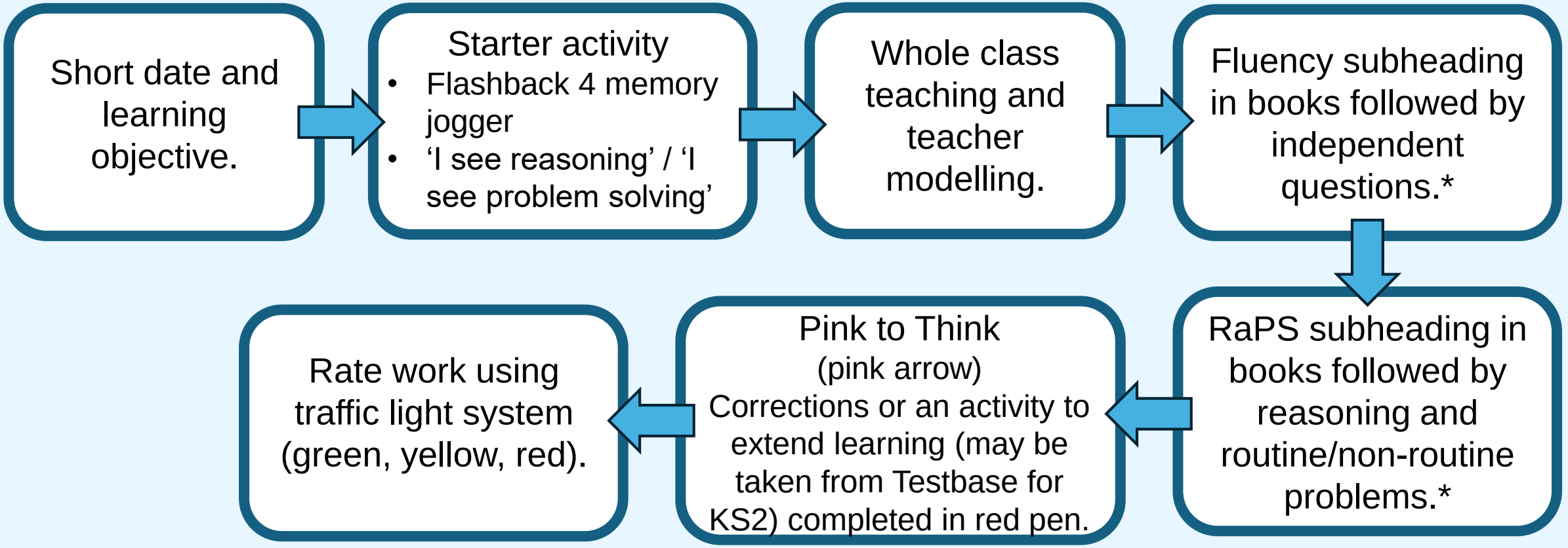




*During each maths topic, children's books are used to help pupils relate mathematics to their own lives and support them in visualising abstract maths ideas.

**Teacher uses pink highlighter to prompt a child to correct their work or to provide a challenge question to take the child's learning deeper.

What does a maths lesson look like in KS1/KS2?



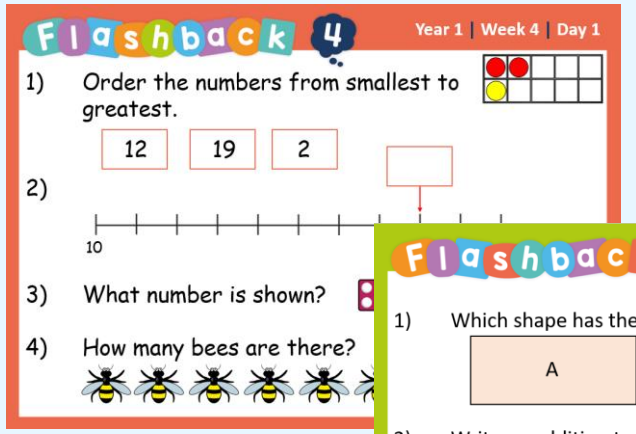
*Mini-plenaries are used at key points during the lesson to identify children who are struggling. These children will receive additional support in an intervention group.

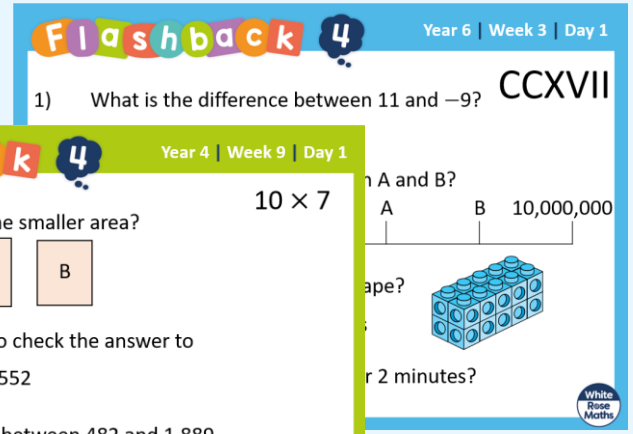
*Children who grasp a concept quickly will be further stretched through challenge questions and activities to take their learning deeper.

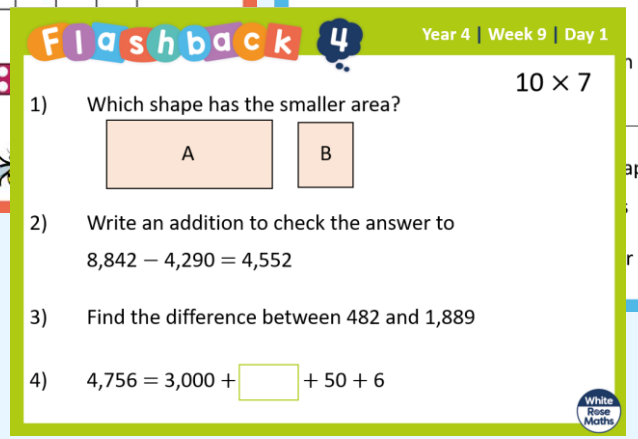
Starter activities for KS1 and KS2

Monday, Wednesday and Friday

- Flashback 4 memory jogger:
  - 1 question from last lesson
  - 1 question from last week
  - 1 question from 2/3 weeks ago
  - 1 question from last term/last year

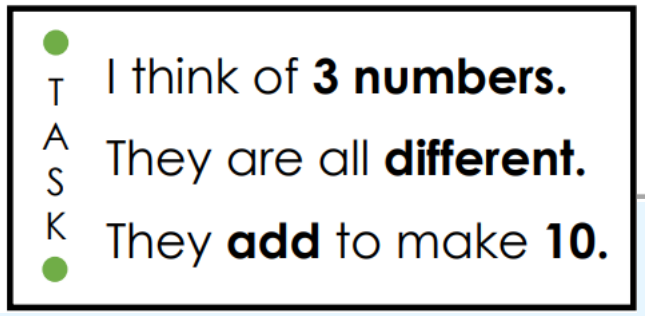


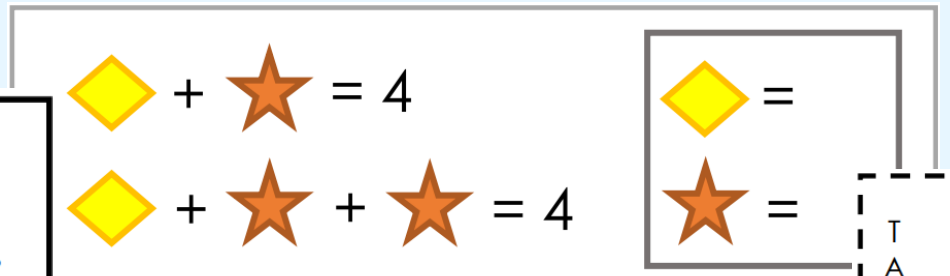


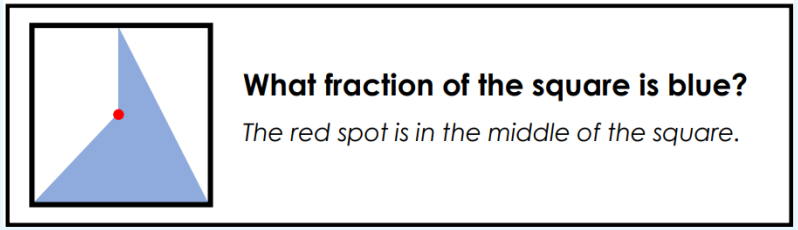


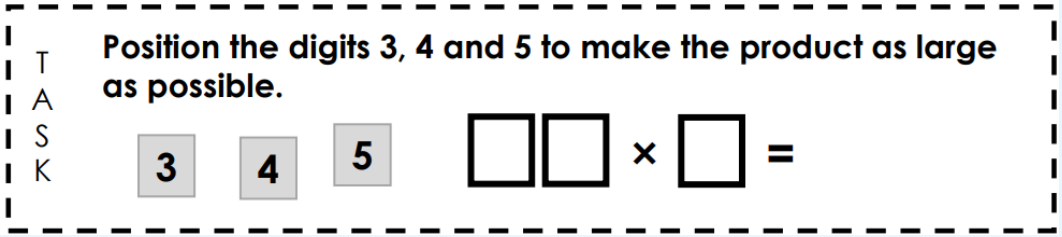
Tuesday and Thursday

- ‘I see reasoning’ / ‘I see problem solving’ starter activity









What does non-routine problem-solving look like at St Josephs?

- ‘I see problem-solving’ activities used twice per week as starter activities in KS1/KS2.
- Routine and/or non-routine problems are used in the ‘RaPS’ part of each maths lesson in KS1/KS2.
- One lesson per week dedicated to solving a non-routine problem.
- Children use concrete/pictorial resources to support them during problem-solving.
- Children are encouraged to monitor their thinking and the effectiveness of their strategies.
- Non-routine problems sourced from NRICH, National Strategies resources, Classroom Secrets (discussion problems) and Third Space Learning resources.