ALVER VALLEY SCHOOLS

EARLY YEARS NETWORK



Welcome



JUNE 2026
NETWORK

EARLY YEARS NETWORK

Alver Valley Schools

The Vision for the Network

A space for Early Years practitioners to meet, share good practice and work collaboratively to develop our practice to improve outcomes for children in our local area.

NETWORKING & SHARING PRACTICE WITH OTHER PRACTITIONERS

A SHORT INPUT ON AN AREA OF INTEREST TO THE GROUP

SHARING & SIGNPOSTING OF USEFUL RESOURCES

Subitising and Early Number Sense



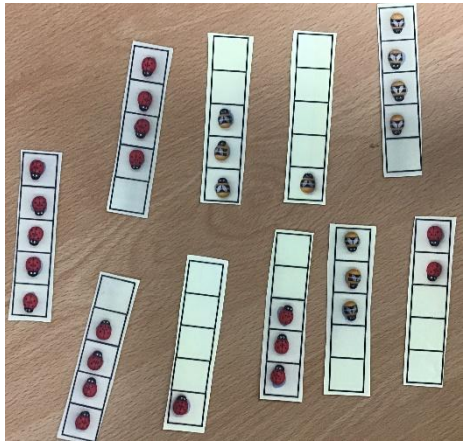
Why is it important?

How can we respond?

What does the research tell us?

What does our framework say?

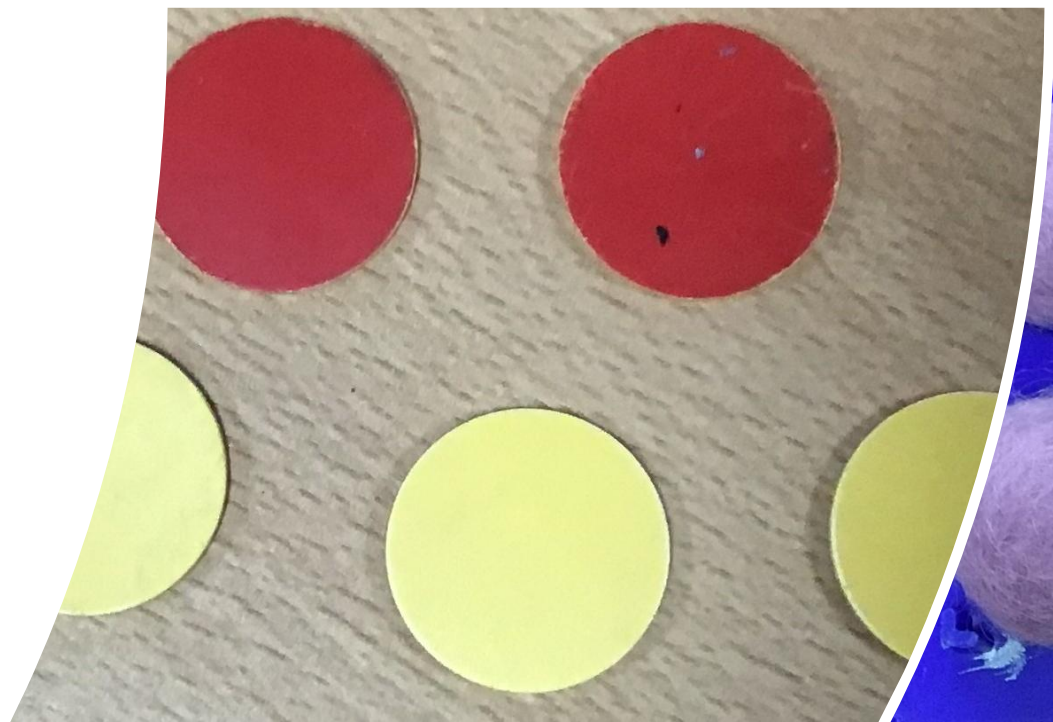
What evidence based strategies can we use?



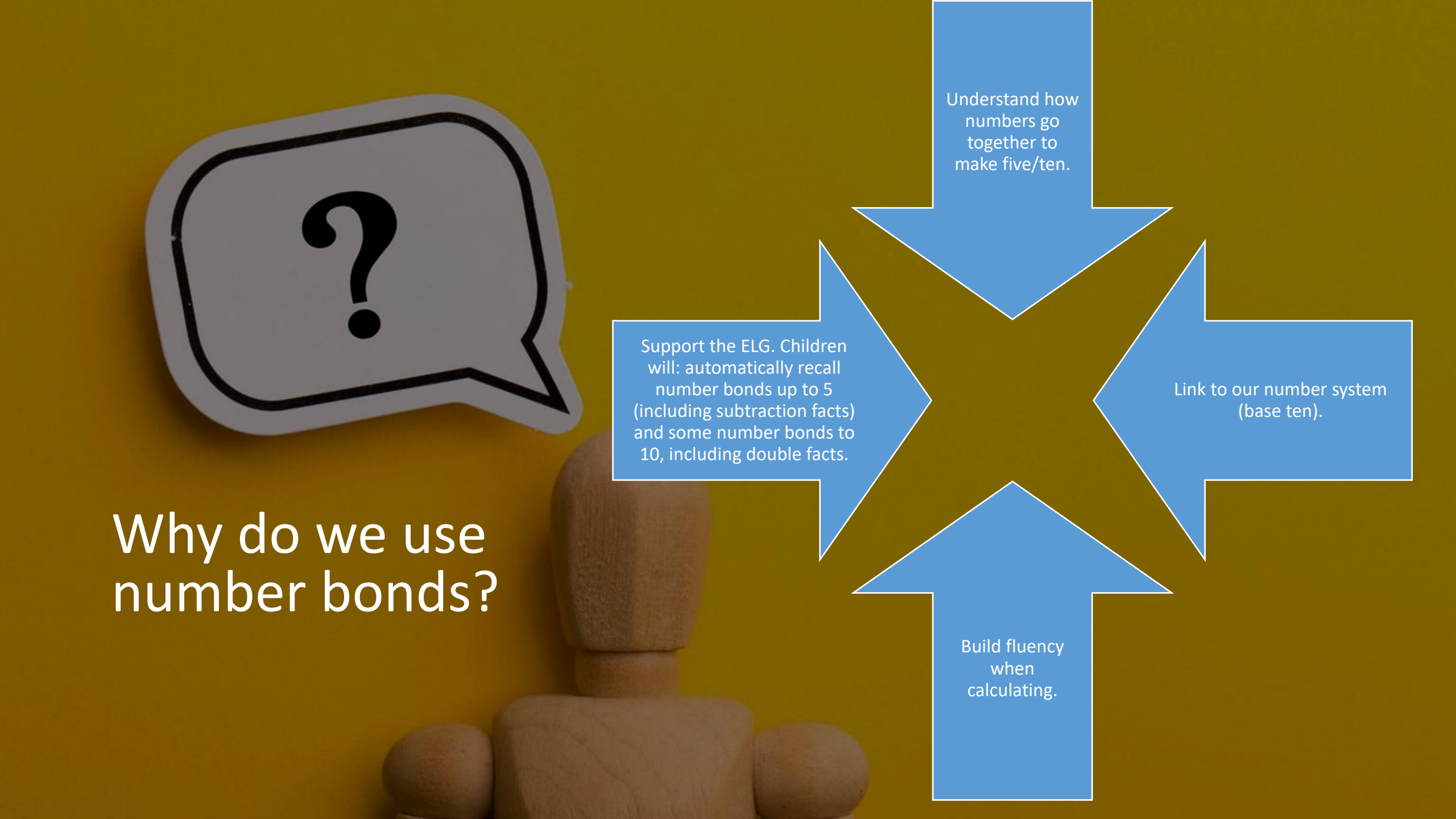
Number Bonds in Early Years











Why do we use number bonds?

Understand how numbers go together to make five/ten.

Support the ELG. Children will: automatically recall number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.

Link to our number system (base ten).

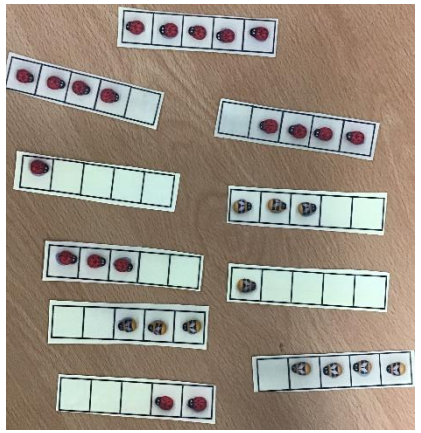
Build fluency when calculating.

How does this skill develop?

1. Perceptual subitising (1,2,3)
2. Conceptual subitising (4+)
3. Five frames
4. Parts/whole
5. More/fewer/the same
6. Pattern













Where do we start?

Visualising

- Noticing- really looking
- Tuning into connections
- Understanding what goes together and why

Cardinality of number

- Beginning to understand and name quantities
- Compare and group
- Separate and reassemble
- See how numbers can be split to help calculate.





Why?

Children need to see how numbers go together and make sense of this.

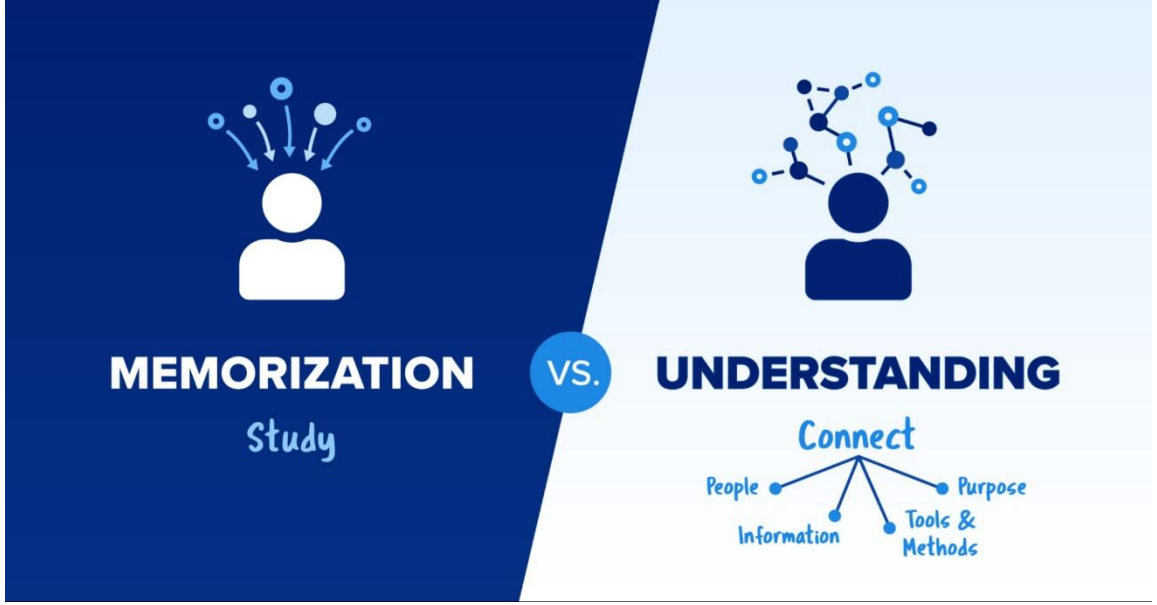
Subitising helps by:

- giving the group a name
- showing different subdivisions within that group
- explaining how the different subdivisic can combine within the group – a natu progression to number bonds

Counting does not develop the same skill. It separates the objects into singular items each with a different name.



Memorising or memory?



- Memorising is like “barking at print”, you have the answer but don’t know where it came from or how you got there. It is difficult to transfer the knowledge and make connections.
- Memory is built from repetition and understanding. Once you have built a memory you can strengthen it to make connections and apply in different contexts.

Skill development

Perceptual subitizing- what you see immediately

- explore 1,2,3 in different ways through different media
- build knowledge through exploration.
- spot 1,2,3 things in play, on their own or as part of a larger set.
- focus on building solid understanding of the quantities, not necessarily the numerical value











Skill Development







Conceptual subitising

Use knowledge of perceptual subitising to identify larger amounts.

See smaller amounts within a bigger group.

Look at set quantities e.g. see the twos, threes or other amount.

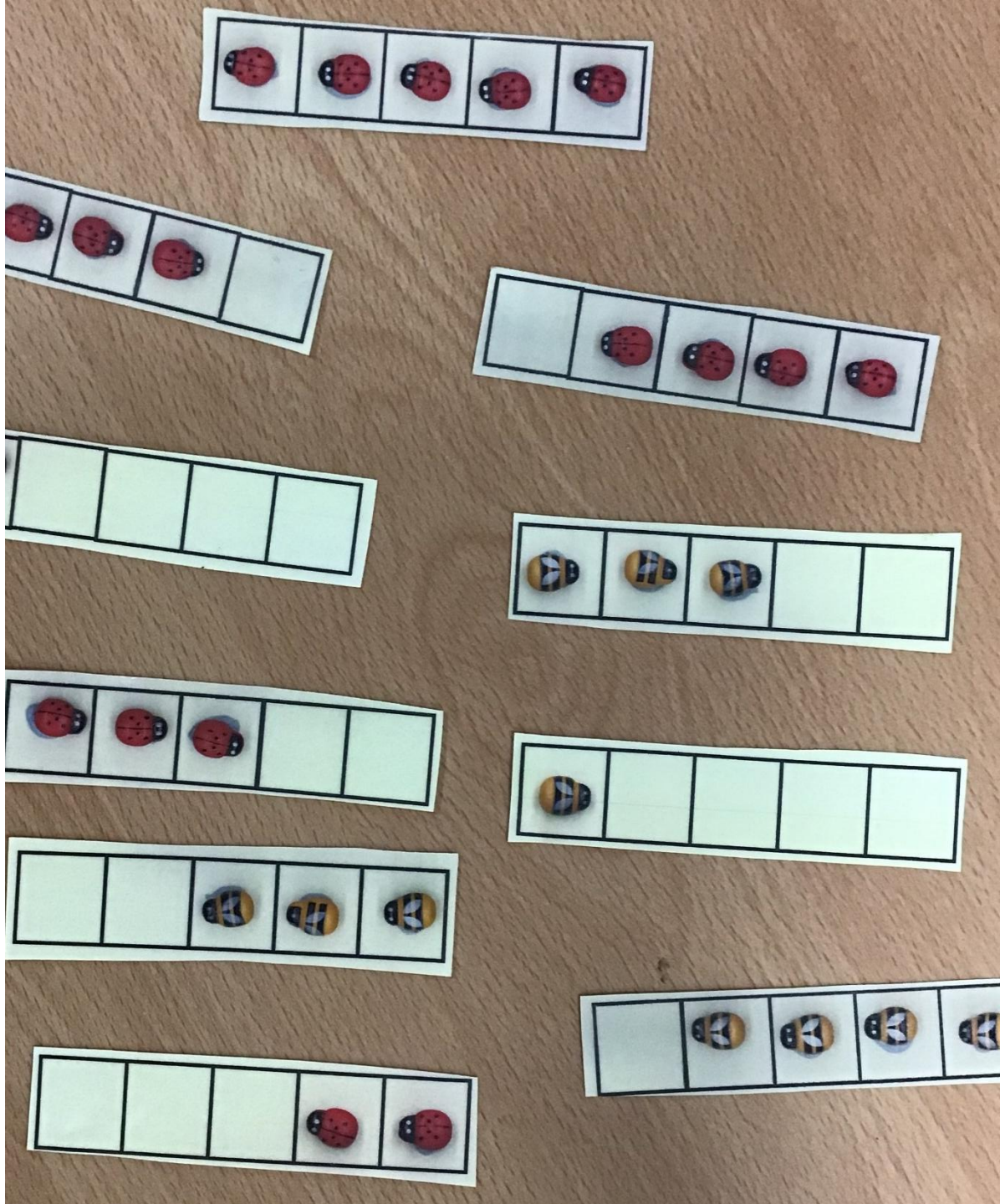
Begin to link to the numeral.

Equal and unequal groupings.

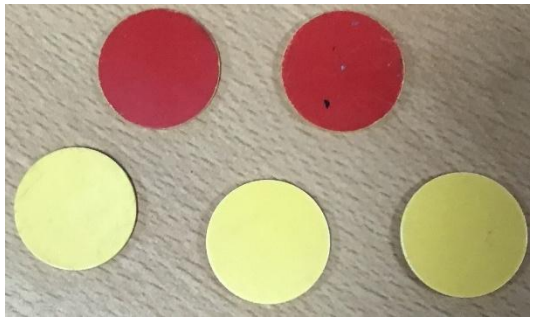
Five frames

Children need to:

- see five frames as full or not full.
- see every combination of a five frame.
- build up a visual image.
- see what is not there, as well as what is there.
- identify same and different
- understand what makes it different.
- see how many more to make 5.



Skill development





Parts/whole

Children need to:

- See how amounts combine and split into equal and unequal parts.
- Link parts of an amount back to the whole amount.
- Build up mathematical and non-mathematical language to relate to the process.



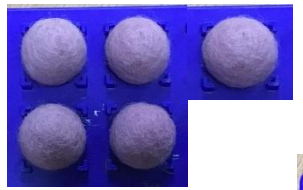
Skill development

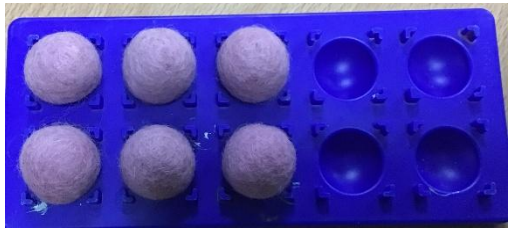


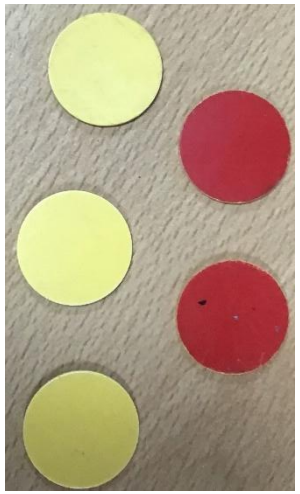


More/fewer/same

- once children begin to build fluency in identifying ‘how many’ they can compare and understand how many more they need.
- giving these amounts labels, first orally then in written form helps to concrete understanding.
- unpicking this with the children helps develop their understanding e.g. 5 counters, 2 are red, 3 are yellow.
- this develops into addition, subtraction and number bonds.
- instant recall can only occur securely when the children have had plenty of practical experience.



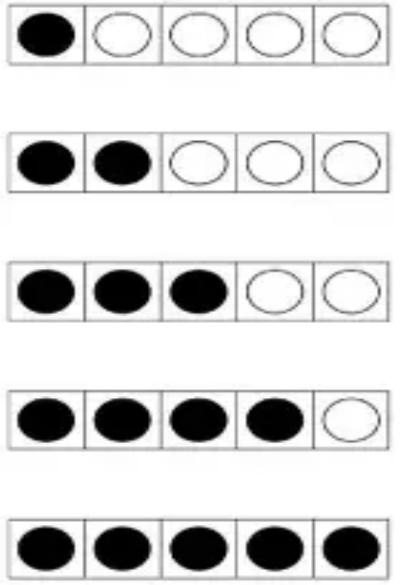


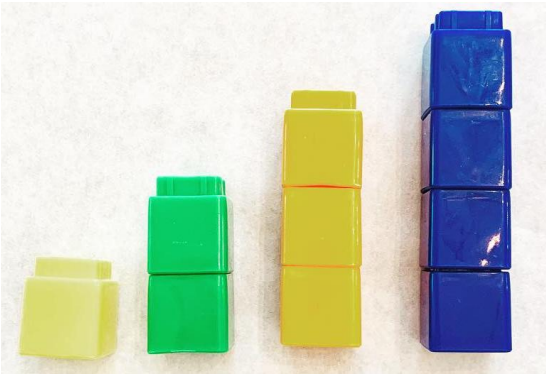


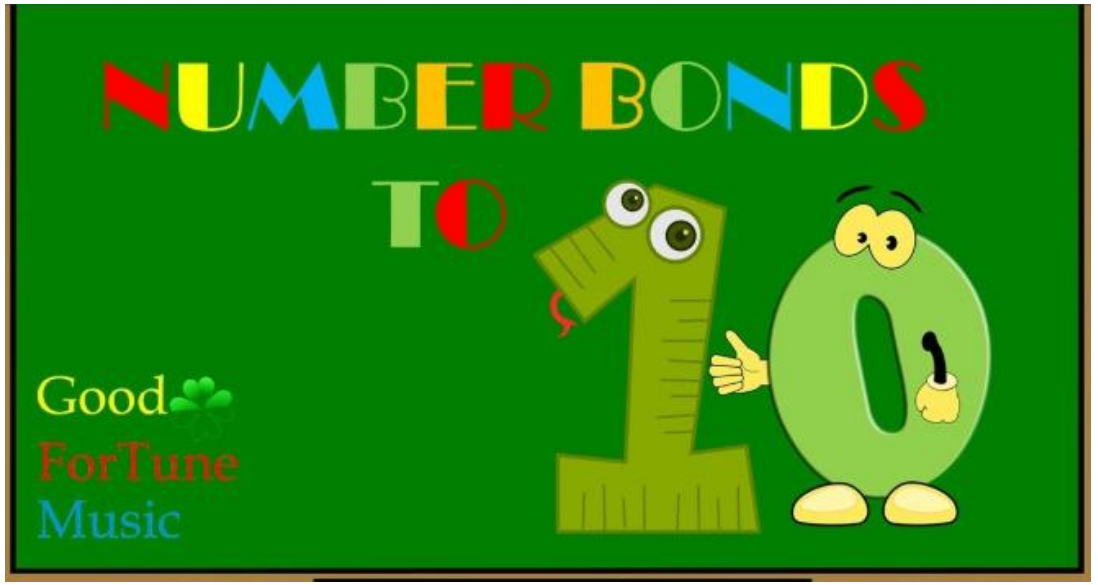


Patterns

- When children begin to spot patterns, they are ready for a systematic approach.
- When children can confidently understand the Maths behind a song or chant, then they are ready to be taught it.







Where do number bonds lead?

- calculating
- money
- teen numbers
- combining and partitioning
- place value
- doubling/halving
- multiples
- times tables
- factors
- mental arithmetic
- problem solving
- number facts
- adding using ten frames.

ELG End of Yr R: Number

- Have a deep understanding of number to 10, including the composition of each number.
- Subitise (recognise quantities without counting) up to 5.
- Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.

ELG End of Yr R: Numerical Patterns

- Verbally count beyond 20, recognising the pattern of the counting system.
- Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.
- Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

Number Bond Progression EYFS N-Yr R

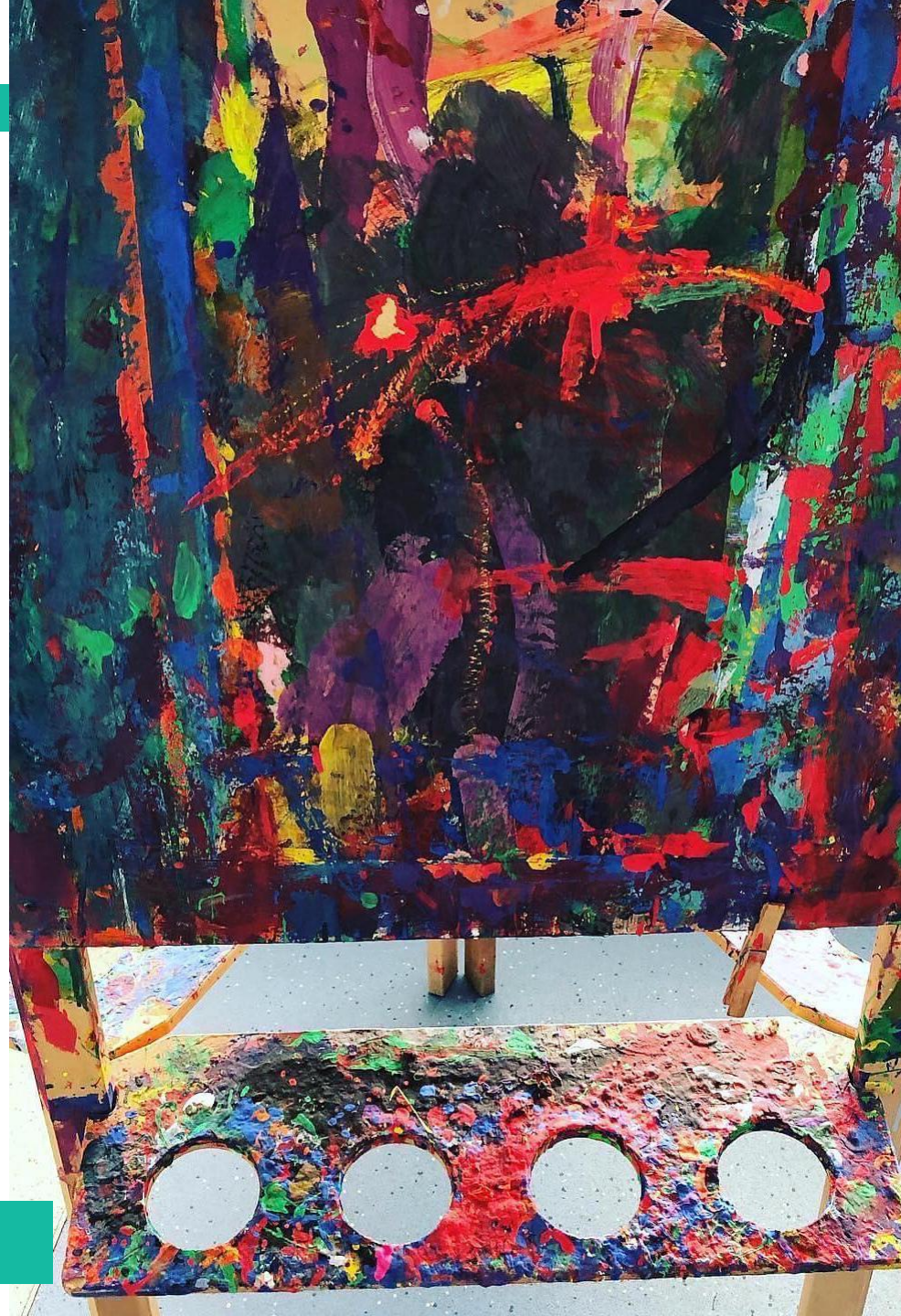
Talk about what you see "what do you see and how do you see it"	Subitise 1-3 (Perceptual Subitising)	See smaller amounts within larger amounts. 1-3 in bigger amounts (Conceptual Subitising) Introduce 5 frames with counters/ natural/ uniform/similar resources
Show 1-3 on a five frame / fingers/ objects	Correctly use more or fewer when comparing shown quantities. Introduce 10 frames (two 5 frames put together).	Understand part/whole. Know groups can be combined (addition). Know groups can be broken up in different ways (subtraction).
Be able to partition numbers to three in different ways adults model and children say, "I see a two and a one that makes three" or "I have three, I take one away, I have two left".	To be able to recall some number facts to three. Addition and subtraction.	Show 1-5 on a five frame /fingers/ objects.
Be able to partition numbers up to 5 in different ways and say, "I see a three and two, that makes five" or "if I have five and take away two, I have three".	Be able to recall number bonds to 5.	Show 6-10 on a tens frame / fingers/ objects.
Be able to partition numbers up to 10 in different ways and say, "There is an eight and two, that makes ten" or "if I have ten and take away five, I have five".	Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.	

Seize chances to reinforce mathematical vocabulary throughout the day in daily routines and play.

SIGNPOSTING & RESOURCES

EEF Article: Developmental Progressions in Early Maths

Ofsted report: Strong foundations in the first years of school



SIGNPOSTING & RESOURCES

Thames Valley and South Central Early Years
Stronger practice hub

Working Together to Strengthen Early Years Practice

The Thames Valley and South Central Early Years Stronger Practice Hub supports early years settings across the region by sharing evidence-informed practice and building local networks of support.

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Find out more about our resources and upcoming events and training

Funded by UK Government
Department for Education

admin@tveysph.org