



Blue Coat C.E. Infant School.



Maths Curriculum

In September 2016 we made some changes to the way we deliver maths across our schools.

- What has stayed the same?

- Children have a 1 hour maths lesson every day.

- Our curriculum fully covers the national curriculum requirements.

- The activities are fun!

- Number is given the most weighting in terms of coverage.

In September 2016 we made some changes to the way we deliver maths across our schools.

- What are the main differences?

- Maths is now taught in mixed ability classes, with the class teacher.

- Children often work in mixed ability partners or groups.

- We have adopted the best aspects of the 'Singapore Maths' approach to teaching maths and have adapted it to meet the needs of children at Blue Coat Infant C.E. School.

What is a 'Singapore' maths approach?

Singapore is consistently top
the international
benchmarking studies for
maths teaching

What's the secret?

What do they do that is
different?

Why do children in
Singapore do better in
Maths than in England?

What is the 'Singapore' maths approach?

Young children are happy playing with blocks or drawing pictures. But they can find number symbols, like $5 + 2 = 7$, mystifying

- The 'Concrete Pictorial Abstract' (CPA) approach to learning is one of the main ideas underpinning a 'Singapore maths' approach.
- Initially a concept is taught with "concrete" materials, later it is represented by models (pictures) and then by abstract notation (such as a plus or equals sign).

An example of CPA.

If I eat one cupcake, how many will be left?

You can talk about all sorts of number equations using concrete objects; addition, subtraction, multiples, dividing.



Stage 1- Concrete - Hands On learning experiences

An example of CPA.

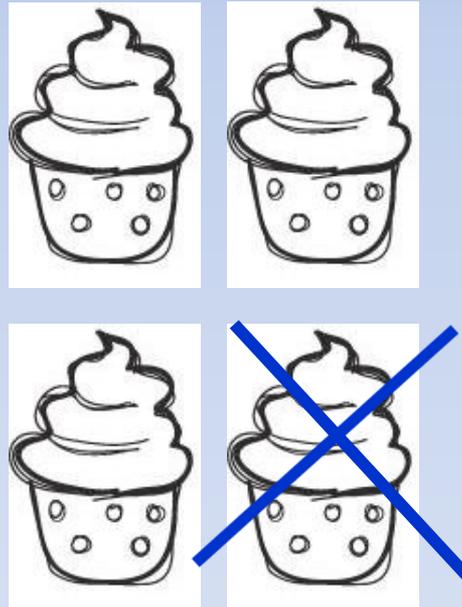
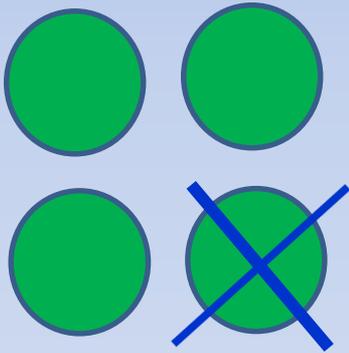
If I eat one cupcake, how many will be left?



Concrete - Hands On learning experiences

An example of CPA.

The second stage is drawing pictures representing objects



Stage 2 - Represented as a model or picture.

An example of CPA.

The third stage is using abstract symbols and numbers.

$$4 - 1 = 3$$

Stage 3 - Abstract - Numbers &
Symbols

What is the 'Singapore' maths approach?

Children learn at a 'Deeper Level' where their understanding and reasoning are very high.

Children are given time and opportunity to master and apply their learning

Singapore maths focuses on fewer topics but covers them in greater depth. Each term builds upon prior knowledge and skills, with students **mastering** them before moving on.

My child is middle or lower ability, how does he/she benefit from the changes?

Children are exposed to the maths that is appropriate for their age.

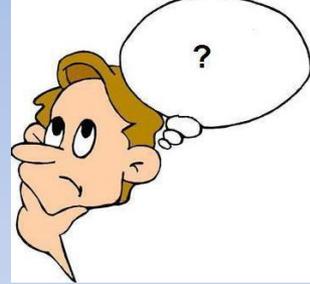
Often they are paired with higher ability children who can give them individual support and encouragement on a peer-to-peer level.

Children benefit from additional staff in the room for extra adult support where necessary.

Intervention opportunities are planned into every week. Children are taught by their own class teacher, teachers therefore build a round understanding of each and every child.

What about my higher ability child? Are they still being stretched?

Learners Remember.....



- 5% of what they learn when they've learned from lecture.
- 10% of what they learn when they've learned from reading.
- 20% of what they learn from audio-visual.
- 30% of what they learn when they see a demonstration.
- 50% of what they learn when engaged in a group discussion.
- 75% of what they learn when they practice what they learned.
- 90% of what they learn when they teach someone else.

My child is higher ability - are they still being stretched ?

Children are given time to consolidate and apply their new learning. There is not a constant need to move forward and learn something else therefore giving their learning time to embed.

- Children are challenged in every lesson through questioning and by being encouraged to think about the maths everyone else is doing but at a greater level.
- There are challenges for the most able / quick finishers in every lesson.
- Children are given opportunity to access challenging 'greater depth' objectives during intervention time. The teacher spends some quality time introducing a new concept with the most able children and children then have the opportunity to explore the objective at their own pace.

If my answer was 24 what could my question have been ?

What can I as a parents do to help?

Play games where you have to roll a dice.

- Teach your child how to tell the time, refer to it constantly e.g. - it's 10 minutes till bed time. How long is this? What can you do in 10 mins? What will the clock look like in 10 mins? Start with o'clock times.
- Practise times tables, start by counting in 2s, 5s and 10s.
- Talk about money, let children pay and work out how much change they should get. We encourage a range of strategies so let the children show you how they would do it. They may need equipment, fingers or hundred squares to help.
- Homework -extend the homework.
- Look at the end of year objectives we have given out at parents evening.



Maths in EYFS?

Maths is taught every day, either as an adult led activity or as continuous, independent provision. Children will spend approximately 30 minutes engaging in whole class directed learning where the children work towards achieving the early learning goals for number and shape & space. Following this session children take turns to work with their teacher in a small group to complete an activity linked to the earlier learning or independently.

In addition to this day, four Maths skills sessions are taught every week by the class teacher.

During child initiated activities (free choice) children are able to access freely mathematical tasks, games and activities to apply their prior learning. Often resources such as counters, objects or pictures, which they will have used with the teacher previously will be available for children to access and use as they like to further explore and consolidate their mathematical knowledge and understanding.