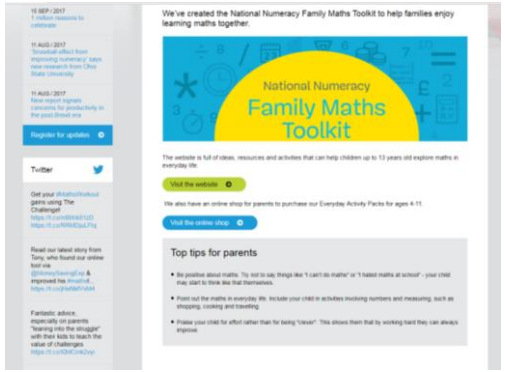
Subject Knowledge Support

Sometimes our own experiences at school were not the best and this can affect our attitudes towards Maths and our confidence. The national numeracy website (https://www.nationalnumeracy.org.uk/) is a wonderful resource provides resources to improve your own Maths as well as ideas and advice for supporting your children.



Want to know more?

If you have any further questions, I would be more than happy to discuss these with you as the Maths lead for the school. Please contact the office to arrange a meeting time.

Thank you for your continued support and enthusiasm for all that we do at Stanion.

Mrs Dalby-Bellis

Maths at Stanion C.E.(Aided) Primary school

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Shape, space and measure:

- Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems.
- They recognise, create and describe patterns. They explore characteristics of everyday objects and shapes and use mathematical language to describe them.

Parents can help at home by:

- Looking for and name shapes at home and in the environment.
- Talk about 3D (solid) shape names -packaging on food items is an excellent way.
- Junk model with 2D and 3D shapes –can you name them all?
- Make pictures with different shapes.
- Involve children in cooking. Look at numbers on scales and measuring jugs.
- Measure and compare feet sizes and height of other family members.
- Shopping activities –real or pretend –use real money to help identify coins and weight.

How do we try and ensure that each child achieves the ELG by the end of reception?

- We collect evidence from numeracy activities and observations (children applying their own skills during their 'choosing' time) as well as ongoing assessments.
- We differentiate work accordingly.
- Numeracy interventions to help children in specific areas.

Reception

The mathematics curriculum in Reception (EYFS) is split into two categories; **number** and **shape, space and measure**.

Maths is taught in a purposeful, practical way and children will use play and exploration to acquire mathematical skills. A large majority of mathematical work is practical and learning will happen in many different contexts around the classroom and outside.

This is our ELG (early learning goal) and we would hope that by the end of the year, the majority of children will be able to do this or most of this (this is classed as age expected).

Numbers: children count reliably with numbers from 1 to 20, place them in order and say which number is one more or one less than a given number.

- Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer.
- They solve problems, including doubling, halving and sharing.

Parents can help at home by:

- Singing songs that take away or add things e.g. 10 green bottles, 1 man went to mow, 5 current buns.
- Exploit all counting opportunities –count stairs, count buttons, count lampposts on a walk, count 'red' cars on a journey etc.
- Commercial games such as snakes and ladders -these help with the counting on strategy.
- Throwing beanbags/balls at numbered targets and adding up scores –who scored the most? The least?
- Practice counting in 2s, 5s and 10s.

How we teach Maths

We believe in teaching Mathematics as a connected subject. We aim to introduce the children to methods of calculation and problem solving strategies through hands on experiences and a real world context. We encourage and dedicate lesson time to discussion of practice and we guide the children to be able to explain their understanding of concepts. This is to deepen their understanding and build connections that enable the children to solve more complex problems.

Support for children who are struggling with new concepts often comes from the use of concrete apparatus to allow the children to see the structure behind the maths. We also use a range of different representations to allow children to experience their Mathematics regularly and repeatedly.

Children often work in mixed ability seating in order to support each other. Those who are struggling are able to gain support from their peers and this builds confidence. Those who feel confident gain opportunities to rehearse their Mathematical talk and articulate their learning with others. This deepens their understanding and develops their reasoning skills.

Recorded work in books may not occur in every lesson in order to give children the time needed to investigate for themselves, discuss their learning and organise their own working without the constraints of squares in books. This work is often evidenced in class books and/or on Tapestry.

How we teach Maths

With the introduction of the 2014 curriculum, children are no longer expected to move on to work from other year groups. Instead they are expected to work at greater depth or mastery. Greater depth of understanding is evidenced through the ability to explain their working to others, use different representations of their working, solve problems with a range of contexts that require them to apply their knowledge.

Our school website has our long-term maths plan to enable you to view what each class is working on in each term. The detailed long-term plans also include the expectations for each year group, some of the activities they may complete and the key language that they need to know.

We teach new concepts in Maths through a mixture of investigations, discussions, exploration, step-by-step instruction and application in a range of contexts.

Our calculation policy and mental maths policy are available on the school website. They detail the order in which new strategies are introduced. We encourage the use and exploration of different methods and discuss their efficiency.

We place high value on the mindset of our children. Maths can be a challenge and can cause anxiety in children and adults. We encourage children to work in pairs or groups and to discuss their thoughts and feelings in maths. We teach the children that when we are learning something new the connections in our brains our weaker and we will make mistakes. By practising, we make the connections strong and become less likely to make mistakes. No one can learn a new skill without making a mistake!

We encourage our children to be problem solvers and to use main powers: imaging, expressing, organising, classifying, convincing, conjecturing, specialising and generalising. Our progression in these skills can be found on the school website.

Homework guidance

Children will be set weekly Maths homework from Year 1 onwards in addition to learning their times tables facts. Please do not worry about giving your children too much help with homework. Homework is designed to be completed by the child, with your support.

Some useful questions to ask your child might be: What do you think the question is asking you to do? How have you solved problems like this in class? What method have you used? Why have you used that? Could we use some equipment or drawings to help us?

Homework will always be work that has already been completed in class although it may be revision of earlier weeks.

The school subscribes to Rock Star Times Tables (https://ttrockstars.com/login). Each child from Year 2 upwards has a login and they can practice their times tables at home against the clock. Knowledge of times tables allows children to access more complex problems without overloading their brain trying to work out the mental number facts.

We have also subscribed to Numbots (https://play.numbots.com/) Every child has a login and they can work on mental addition and subtraction strategies at home.