Grangers are Computing Experts

#togetherwegrow

Marches Academy Trust

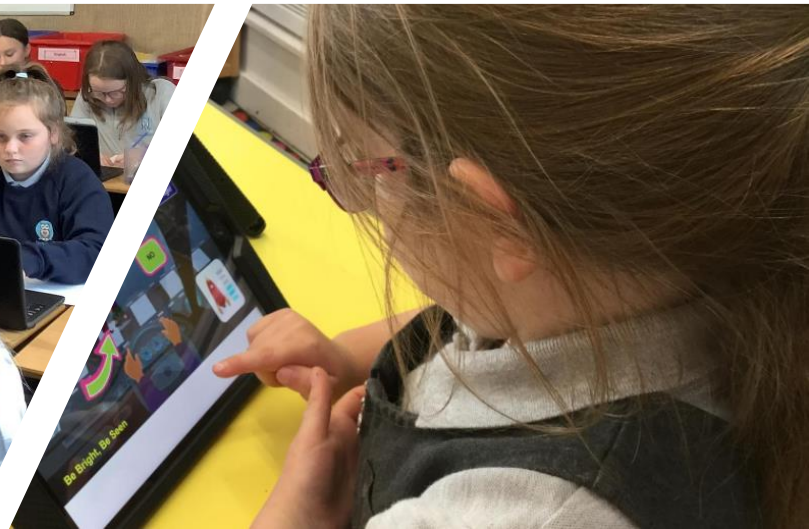
Computing – Intent

- Our intent for computing is to put the children in a central role of their computing lives in primary education. They should learn how to acquire the **concepts** and **approaches** for the broader education of computational thinking and build on these year-by-year.
- As citizens of the world, they should also be aware of the risks associated with being online and be given the tools to safe-guard themselves and know who to turn to if they do not feel safe. E-safety is covered during lessons to ensure pupils know how to keep themselves safe.
- Online web safety is at the heart of our curriculum to ensure pupils know how to stay safe and have the skills when to know what to do if they feel they are not safe.

Grangers dream big and fly high!







Computing – Our Vision

- The national curriculum purpose of study begins by highlighting that *'high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world.'*
- We understand the massive role of Information Technology (including use of devices –phones, ipads, gaming) has for Grangers in the modern world and the potential impact of this on their future lives as the world becomes more digital and technology led.

Grangers dream big and fly high!





Computing – Our Vision continued…

- Computing vocabulary *(logic, evaluating, algorithms, patterns, decomposition, abstraction, tinkering, creating, debugging, preserving, collaborating)* is used as part of our everyday thinking. For example, we could think of ***debugging*** in English when we are editing and improving our writing. We could also think of using ***algorithms and logic*** as a set of instructions – breaking an idea down in to small manageable steps, such as how to grow a plant successfully.
- As a school, these computational thinking concepts and approaches represent how problems are resolved in the world we live and allowing children to experience and solve such problems will put them in a better place to be independent thinkers in modern society. Planning in the classroom nurtures this thinking and learning and provides an environment where curiosity (one of our Granger values) is encouraged and celebrated.





Computing – Our Implementation

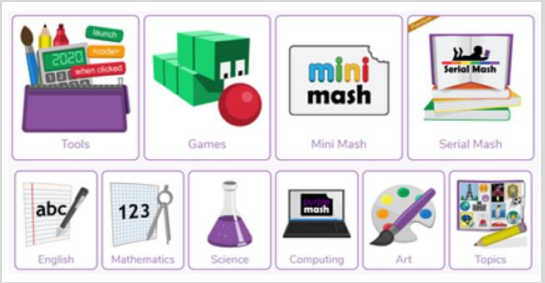
- Computing at Grange Primary is taught using the Kapow computing plans.
- Kapow contains a wide range of age-appropriate, creative software tools for writing, drawing, coding, animating, blogging and much more.

- Keys areas covered by Kapow include systems and networks, programming, creating media, data handling and online safety. These skills help prepare pupils for life and employment in their future.

- The spiral curriculum used by Kapow ensure that pupils build on previous learning , revisiting skills with the complexity increasing as pupils move through the school.







Computing – Our Implementation continued…

- Computing is explicitly taught for one hour per week in a designated Computing lesson, however many more links are made throughout the week across the curriculum – including the use of ICT to publish and present children's finished pieces of work, as well as for research and investigations.
- Children also use a range of pre-existing programmes on class laptops and ipads as part of our curriculum offer for other subjects such as Spelling Shed, the Read Write Inc phonics portal and library and access to online maths games such as TT Rockstars and maths whizz.
- Pupils have access to devices to support their learning. In UKS2 pupils have their own ipads, and work is set and completed on their devices
- The language of computing, from the concepts and approaches, is used in everyday contexts to link the thinking of computing in a cross-curricular way
- E-safety days and activities are planned in conjunction with the annual national Safer Internet Day and parents are regularly sent E-safety update

Kapow Primary™



Computing - Impact

How is computing assessed?

- Within the lesson, observations are made by the class teacher through discussions and questioning with children.
- Questioning encourages children to think of new algorithms to solve and debug – for instance when using microbits, developing instructions and algorithims.
- Pupils use their devices in UKS2 for research to support their learning.
- Teachers are able to check pupils work by looking on their personal folders on one note.
- At the end of every unit, children are judged to be working below, at or above expected for the technical computing skills taught. This assessment is recorded in books and monitored by the Computing co-ordinator.

