

## **Portreath School Subject Statement 2021**

**Subject: Computing and IT**

**Leader: Sam Forsdick**

### **Quote that guides us**

*“We need technology in every classroom and in every student and teacher’s hand, because it is the pen and paper of our time, and it is the lens through which we experience much of our world.” - David Warlick*

### **Why is it important to teach Computing?**

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

### **Key Concepts:**

**That computers can make things more efficient and easier**

**There is a variety of devices which suit different things**

**The internet is a powerful tool when used safely**

**The importance of being a critical thinker when using the internet and ‘not believing everything you read’**

**The importance of coding in the modern age**

We aim for children to become responsible, competent, confident and creative users of information and communication technology.

### **What we do well as a school:**

Through our computing curriculum at Portreath we aim to give our pupils the life-skills that will enable them to embrace and utilise new technology in a socially responsible and safe way in order to flourish. We want our pupils to be able to operate in the 21st century workplace. We want children to become autonomous, independent users of computing technologies, gaining confidence and enjoyment from their activities. We want the use of technology to support learning across the entire curriculum and to ensure that our curriculum is accessible to every child. Not only do we want them to be digitally literate and competent end-users of technology but through our computing lessons we want them to develop creativity, resilience and problem-solving and critical thinking skills. We want our pupils to have a breadth of experience to develop their understanding of themselves as individuals within their community but also as members of a wider global community and as responsible digital citizens. Google Classroom, Tapestry and Google Meets had a huge positive impact during lockdown. The school lent out technology to enable all children to access remote learning.

We applied for a grant from the Belling Trust and was successful and this led to us having a range of new equipment including a touchscreen in every classroom.

## **Curriculum Design**

At Portreath, computing is taught in discreet computing lessons. This is led by the Espresso Programme and supplemented by other resources. Crofty Mat are currently putting together small steps that we will use to guide us. These give small steps that build towards key end points that link to the National Curriculum. These break down the National Curriculum statements into smaller steps. Every lesson is individually planned so that it can be effectively taught and so it meets the needs of all our pupils. Having discreet lessons means that the children are able to develop depth in their knowledge and skills over the duration of each of their computing topics. Where appropriate, meaningful links will be made between the computing curriculum at the wider curriculum. In computing lessons the children will use either the iPads or the Chromebooks/laptops in order to access a range of apps and software. Discreet computing lessons will focus on the curriculum skills of information technology and digital literacy. We use Espresso coding as well as Scratch, hopscotch, Daisy the Dinosaur, hour of Code and lightbot as a platform for coding in years 1 and above. A set of Bluebots are kept in the early years for the reception children to programme.

## **E-Safety**

At Portreath School we use Gooseberry Planet to deliver our online-safety lessons. Gooseberry Planet is a software platform designed to educate children, teachers and parents about the dangers online through 'game based learning'. The Online Education Software Platform: teaching online safety via 'game based learning' joining child, teacher and parent at the same time through technology. Children play an interactive game which simulates real life online scenarios and addresses serious issues in a fun and engaging ways. A rigorous monitoring and assessment tool supports the platform for teachers. Parents have access to the platform and the system emails the parent every time their child plays and completes a scenario. This encourages the carer to be part of their child's learning journey. Gooseberry Planet offers a 12-week programme for every child in each year of their primary school education. The children can play the games that have been covered in school. Every year we have an e-safety day as a school which includes a dedicated assembly. Which complements the ongoing lessons

## **Resources**

We have a large range of resources from a class set of iPads, a class set of Chromebooks, a class set of laptops, Blue Bots (kept in the early years) as well as an interactive touch screen in every classroom.

## **Training**

Over the last couple of years, we have had a number of training sessions in staff meetings. Quick 5 minute sessions demonstrating Apps and 'top tips' for using a chrome book have been delivered on a regular basis this has helped develop staff's subject knowledge. We also make use of experts e.g. Martin Post from the Crofty MAT to support the staff when the IT Co-ordinator cannot help. Many online training sessions run by the ASPIRE Trust have been attended to support the teachers in this subject. Staff all complete online e-safety training. Teachers have received Gooseberry Planet training.

## **What does monitoring tell us?**

Discussion with children show that children are able to articulate what they have learnt not just activities undertaken. The children demonstrated their enthusiasm about using technology. The computer plans to hold pupil conferences this year to gain a deeper insight into children's views, knowledge and skills.

## **Next Steps**

- Creating a small steps curriculum
- Helping to develop all staff's subject knowledge
- Ensuring all children understand the key concepts