Autumn 2 E-safety, programming, digital art & data handling

Knowledge *I know...*	Skills *I can...*	Links back to *I remember...*
• It is important to be safe when using the internet, laptops and iPads. • To use kiddle when searching online. • To search sensibly and **not** to deliberately look for or send anything unpleasant online. • To speak to a grown-up if I see something scary online. • J2data turtle program can be used to make pathways and/or pictures. • How to use J2data turtle. • An algorithm is a precise set of ordered steps that can be followed by a human or a computer to achieve a task. • A program is a set of ordered commands that can be run by a computer to complete a task. • That technology (iPads) can be used to create pictures with a range of effects. • Pictograms and block diagrams can be used to present data clearly. • Pictograms and block diagrams help to answers questions about totalling and comparing.	• Use kiddle to search online. • Explain what it means to stay safe online. • Talk about what I have seen online • Get help from an adult if something online is worrying me. • Explain what algorithms are. • Create a precise program using j2data turtle. • I can use an iPad to create a range of effects - shades, patterns and results using different eTools (Starry Night) • I can talk about how I have used digital art to create a picture. • I can look at a pictogram and/or block diagram ask and answer simple questions (by counting objects in each category and sorting categories by quantity) • I can construct a pictogram and/or block diagram using j2data chart.	• My teacher using kiddle to search online to find information. • Programming Beebots to move around a map. • An algorithm is a precise set of ordered steps. • Digital art is a type of art made using technology. • Constructing a pictogram and/or block diagram using j2data chart **as a class**.

Vocabulary:	Images:
Kiddle: an online search engine for children. **J2data turtle:** a program that can be used to make pathways and/or pictures. **J2data chart:** a program that can be used to make block diagrams and/or pictograms. **Algorithm:** a precise set of ordered steps that can be followed by a human or a computer to achieve a task. **Program:** a set of ordered commands that can be run by a computer to complete a task. **Command**: a single instruction that can be used in a program to control a computer. **Pictogram**: a *pictogram* is a chart that uses pictures to represent data. **Block diagram**: a simple *chart* which displays units of data with **blocks**. **Data**: a collection of information.	

Spring 1 Precise programming and debugging of Beebot, email, esafety

Knowledge *I know...*	Skills *I can...*	Links back to *I remember...*
• How to use a Beebot • An algorithm is a precise set of ordered steps. • A program is a set of ordered commands that can be run by a computer to achieve a task. • Debugging is finding and fixing a problem. • How to use j2data mix to present my ideas. • Emails can be used for communication. • To follow our HIS Golden Rules online. • Who to ask for help if I am worried about something I see/receive online (ThinkUKnow).	• Explain what algorithms are. • Create a precise program using a Beebot. • Create and debug simple programs on a Beebot. • Use j2data mix to make a picture and write a sentence. • Select the correct tools. • Present my ideas (above) to a group. • Send a message through a class/shared email. • Use email to ask questions. • Communicate safely and respectively when using emails.	• Searching safely online using Kiddle • How to stay safe online • Using an iPad to create a picture • Facetime/zoom call on our KIT day • Sending a class email on our KIT day • Using SketchesSchool • Programming a Beebot with support

Vocabulary:	Images:
J2data mix: a program that combines text and images. **Algorithm:** a precise set of ordered steps that can be followed by a human or a computer to achieve a task. **Beebot:** a programable robot **Debugging:** finding and fixing a problem with a program. **Email**: messages delivered by an electronic device. **Present:** show what I have done. **Program:** a set of ordered commands that can be run by a computer to complete a task. **Command**: a single instruction that can be used in a program to control a computer. **Retrieve:** find information stored in a computer. **Tool:** a device used to carry out a particular job. **Save:** store for future use.	

Summer 1 Predicting behaviour of Beebots, audio, film making, e-safety

Knowledge *I know…*	Skills *I can…*	Links back to *I remember…*
• That a Beebot is more effective on certain surfaces • That a Beetbot will slow down/speed up when travelling at an incline. • How to measure how far a Beebot travels (standard). • An audio recording has no image. • You can combine still images and sound using Photostory 3. • A video combines moving images and sounds. • The iPad has different apps to record images and sounds. • That the internet can sometimes be unsafe. • To follow our HIS Golden Rules when using all electronic devices.	• Predict which surface is most effective for a Beebot. • Predict what will happen to a Beebot when programmed to travel at an incline. • Predict how far a Beebot will travel in standard units. • Use the voice memo app (iPad) to record an audio clip. • Combine images to create a short film for a story retell. • Record a video clip using a camera/iPad. • Add object animation with the support of a teacher. • Identify risks when online. • Use an iPad safely and respectively.	• How to use a Beebot • An algorithm is a precise set of ordered steps. • A program is a set of ordered commands that can be run be a computer to complete a task • Debugging is finding and fixing a problem. • Use j2data Mix to make a picture and write a sentence. • Select the correct tools. • Present my ideas (above) to a group. • Emails can be used for communication. • To follow our HIS Golden Rules online. • Who to ask for help if I am worried about something I see/receive online (ThinkUKnow).

Vocabulary:	Images:
Audio: sound when recorded. **App**: a program that is on a tablet, phone or watch. **Beebot:** a programable robot **Command:** a single instruction that can be used in a program to control a computer. **Incline**: a slope **Photostory 3:** a program that makes digital pictures into a story. **Present:** show what I have done. **Predict:** say or estimate what might happen. **Program:** a set of ordered commands that can be run be a computer to complete a task. **Record**: to store sounds or moving pictures using electronic equipment. **Save:** store for future use. **Video:** recording of moving images.	

Progress is **knowing more** (knowledge), **remembering more** (links back to), **being able to do more** (skills)