## **Progression of skills: Computing**

Programme of study: E-Safety				
Year R	Year 1	Year 2		
<ul> <li>To be able to speak to an adult about anything that worries them on a device eg. On an app, a website.</li> <li>To know what information should not be given out (privacy)</li> </ul>	<ul> <li>To know not to feel guilty if something comes on the screen that makes me feel bad.</li> <li>Be able to speak to an adult about what I have seen.</li> <li>Talk about what I am doing on a computer.</li> <li>To say if something I find on the internet makes me feel bad.</li> <li>To be able to inform others about how to be safe on the internet.</li> <li>To know what devices connect to the internet and to others around the world.</li> <li>Use a laptop or Ipad to access information online safely.</li> </ul>	<ul> <li>To understand that one should only talk to people they know online in real life</li> <li>To know to tell a trusted adult if anything happens that makes them worried.</li> <li>To understand that once messages have been sent online they cannot be taken back.</li> <li>To know that if personal information is posted online it could be seen by others and that it should be kept private.</li> <li>To know about emails and what emails can trusted and opened</li> <li>Recognise when an email (and other information) isn't safe to open.</li> <li>Inform others about how to keep safe and what to look out for.</li> <li>Follow rules in order to keep safe online.</li> <li>To know how to act if they see something inappropriate or unsafe online.</li> </ul>		

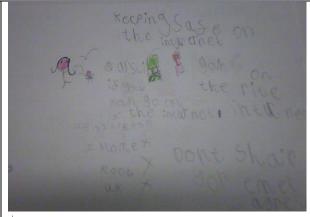
In Science we were learning all about nocturnal animals. We talked about how we can find out information from the Internet using a search engine so we opened up Google to help us. We typed in 'nocturnal night-time animals and we learned how to look up information, pictures, videos and news. We followed some links to find out more information from websites including Chester Zoo.











E-safety-Autumn term 2020

In Badgers we talked about what we need to do to keep ourselves safe when we go on the internet.

We discussed what the internet was and what the internet is used for.

We know that we need to tell a trusted adult if we feel unsafe or do not like what we see on the internet. We discussed who a trusted adult is, adults in school, at home, in clubs. We only use the websites that we have been told to use. We also know that we do not give out any personal information like our address or telephone number.

We then made a poster to show others how to stay safe on the internet.



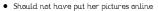
23	s/ 10/	20:
	۰	I can understand that once messages have been sent online they cannot be taken back.
	۰	I know that if personal information is posted online it could be seen by others and that i should be kept private.

## E-Safety – emails and personal information

In Ducks class we looked at the app "confidential Information" on the purple mash app. We learnt about emails: what they are and what they are for: We then looked at some different types of emails. We learned about spam emails and figured out that they would be "scams" and would not be very safe to reply to.

In our pairs and as a class we looked at an email from a girl called Caitlin asking about whether or not she should respond to someone that she doesn't know about a party It was decided that it wasn't safe for her

and n our pairs we wrote back via email that she should not go. After this we looked at a profile of a girl called Aimee to check whether or not she was being safe online. We decided that Aimee:



- Shouldn't share her school and class
- Should not share her location
- Shouldn't give out her phone number
- Should think about maybe keeping her birthday private



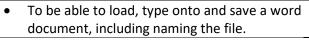
Programme of study: Information Technology				
Year R	Year 1	Year 2		
<ul> <li>To explore and use a tablet or laptop</li> <li>To know that to move the cursor you should use a trackpad or mouse</li> <li>To know how to click on a laptop</li> <li>To know that to type you need to press keys on a laptop</li> <li>To understand how to use a touchscreen</li> <li>To load up an app on a tablet with support</li> </ul>	<ul> <li>Load and log into purple mash by either using a browser or a QR code application.</li> <li>To create a picture using purple mash.</li> <li>Be able to use the camera function and take a picture of themselves or a partner.</li> <li>To save their work after it has been completed, including naming the file.</li> <li>Log into the laptops using a username and password</li> <li>To be able to load, type onto and save a word document, including naming the file.</li> </ul>	<ul> <li>Load and log into purple mash by either using browser or a QR code application.</li> <li>To be able to use the camera function to take a picture of themselves or a partner</li> <li>Type onto purple mash to go with their work – usin a tablet, laptop</li> <li>To save their work after it has been completed including naming the file.</li> <li>Load a browser and use a search engine to navigate to a designated website and then webpage, eg. A maths game, Great fire of London game</li> <li>Log into the laptops using a username and password</li> </ul>		



Jim

Wolves have sharp teeth because they need to eat meat.

2 fingers. Space and backspace. Saved independently.





Hello my name is Samuel Pepys and I am writing about the Great Fire of London in my important diary.

Programme of study: Research				
Year R	Year 1	Year 2		
<ul> <li>To be able to talk about the internet and what can be found on it – how they use it.</li> <li>To explore a website or webpage using the skills they have previously learnt last half term.</li> <li>To be able to watch a video on a given topic, eg maths numbers</li> </ul>	<ul> <li>To understand what the internet is and does</li> <li>To learn about different components if the internet – see key words.</li> <li>To Come up with questions about what they want to find out about a key person or event, such as Mary Anning.</li> <li>To remember how to stay safe on the internet</li> <li>To research information about a key person or event</li> </ul>	<ul> <li>To understand what the internet is and does</li> <li>To learn about different components if the internet – see key words.</li> <li>To Come up with questions about what they want to research</li> <li>To remember how to stay safe on the internet</li> <li>Research a topic in pairs using laptops or tablets and independently use a child friendly search engine to do so</li> </ul>		

### Nocturnal animals Science/Technology link

We made a class brainstorm of what you already know about nocturnal animals, at the end of the session we added in a different colour what we had found out.

We watched BBC video: https://www.bbc.co.uk/bitesize/clips/zsshfg8; talk about why these animals are nocturnal e.g. Is that when their food comes out

We sorted nocturnal animals and animals that are awake in the day into sets.

Where could we find more out about nocturnal animals?

We choose to find out about Owls, Hedgehogs and wolves. We used Google to find out these facts.

Owls hunt at night to avoid the heat and predators.

They have good eyesight-so they can see where they are going and look for food.

They have good hearing.

Animals that they eat are called pray.

#### Hedgehogs-

Hedgehogs search for food-worms and bugs.

They sleep more in the cold.

They have poor eyesight but good hearing. They have a good sense of small, their whiskers help

#### Wolves-

Their eyes glow in the dark. Their eyesight is good.

They howl to communicate and warn off predators.

They hunt-They are carnivores and eat meat.

They have sharp teeth and claws

Their fur coat keeps them warm.





(AD), 3. Pandas are BIG eaters - every day they fill their tummies for up to 12 hours.

shifting up to 12 kilograms of bambool 4. The giant panda's scientific name is





Giant **Panda**. High in dense bamboo forests in the misty, rainy mountains of southwestern China lives one of the world's rarest mammals: the giant **panda**, also ... tps://kids.nationalgeographic.com/animals/mammals/facts/giant-panda



Siant Panda | Species | WWF

Pandas live mainly in temperate forests high in the mountains of southwest China , where they subsist almost entirely on bamboo. They must eat around 26 to 84 ... ecies/giant-panda



Giant panda Facts for Kids

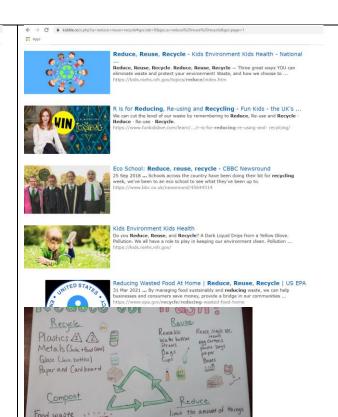
Adults measure around 1.2 to 1.8 m (4 to 6 ft) long, including a tail of about 13 cm (5.1 in), and 60 to 90 cm (2.0 to 3.0 ft) tall at the shoulder. Males can weigh up to  $\,\dots$ ps://kids.kiddle.co/Giant\_panda



Giant panda | San Diego Zoo Kids

Pandas use their teeth to peel off the tough outer layers to reveal the soft inner tissue of the stalk. Strong jawbones and cheek muscles help pandas crush and ...

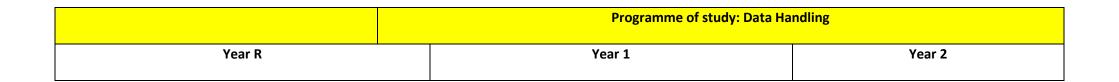
Using Kiddle/child friendly search engine to browse and find out about a given topic.



Using Kiddle/child friendly search engine to browse and find out about a given topic. Then, using that information to inform others and create an information poster/leaflet.

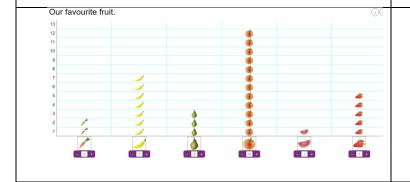
we buy!

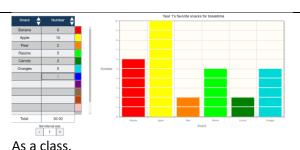
Food waste Do NOT

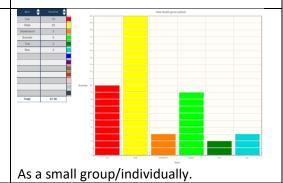


- Gather information (data) about things from their own experience
- Record data using a pictogram
- Talk about a pictogram, eg. The most, the least, their favourite... etc.
- Gather data using a lesson from school eg.
   Geography the number of buildings on their road.
- Classify and sort data they have gathered practically – eg. Sorting animals by their features.
- Graph data: plotting data they have gathered from a lesson into a pictogram, bar graph or line graph.
- Place objects into a table to categorise information.

- Independently gather information using their own experiences from lessons eg from a science experiment.
- Record data in a logical sense chronologically, by size, by colour, by age etc.
- Graph information appropriately, selecting which graph is fit for purpose.
- Interpret what data is used for, why has it been recorded in a certain way, has it been recorded efficiently
- Find answers to specific questions using data eg. What is the largest, tallest, smallest, most, least etc.
- Use search tools within a given database to find information to support learning and find answers to questions.







## **Programme of study: Computer Science**

# To explore and use a programmable toy/bee bot

• To understand the outcome of inputs into a bee bot/ programmable toy

Year R

- To understand what a sequence of instructions are i.e multiple steps
- To be able to give simple instructions i.e make the bee bot go forward then left.

## Year 1

- To know about and understand algorithms, being able to follow a verbal algorithm.
- To be able to create their own simple algorithm and record it.
- To program and debug a bee bot
- To create an algorithm for a partner to follow
- Follow instructions to complete task on an app
- Input a simple block code to complete levels in an app (game)

## Year 2

- To use, understand and create algorithms.
- To know what algorithms and code can be used for
- To program using a bee bot or an app.
- To complete simple block coding to give instructions to an app
- To debug where necessary so that bee bots and applications function efficiently.
- To understand what code is and that is used by computers as a language.
- To create more complex algorithms, code or instructions via the use of a game (hour of code)





