

TERM: Autumn 2		YEAR GROUP: Y6	SUBJECT: COMPUTING		
WEEK 1 DATE: WB 04.11.24	WEEK 2 DATE: WB 11.11.24	WEEK 3 DATE: WB 18.11.24	WEEK 4 DATE: WB 25.11.25	WEEK 5 DATE: WB 02.12.24	WEEK 6 DATE: WB 09.12.24
<p>LO: To explain how data can be safely transferred.</p> <p>Success Criteria: I can identify that data can become corrupted within a network. I can explain how data sent in packets is more robust. I can recognise the need to update devices and software.</p> <p>Main Event: Data transmission presentation and discuss. Data transmission game. Allow plenty of space between all the groups (e.g. at least 10 metres between the data transmitters and the data receivers.).</p> <p>Support: Begin the game and see if the 'data receivers' can decode the message sent to them. Allow each group a turn at being the 'data transmitters', the 'data receivers' and 'corrupters'. Set a timer to instruct the children when to swap.</p> <p>Support: Should build up their encoding skills by having the Main event task broken down into smaller steps</p> <p>Challenge: Should be challenged to consider a way to encode the data so that it is robust enough to cope with packets getting lost.</p>	<p>LO: To investigate the data usage of different online activities.</p> <p>Success Criteria: can compare methods of wireless data transfer. I can recognise the differences between WiFi and mobile data. I can use a spreadsheet to compare the data usage of various online activities</p> <p>Main Event: Model how to create the spreadsheet. The children should use Confused.com - Mobile Data Calculator to choose their three activities, collect data results and input these into the spreadsheet. The children could also spend some time enhancing the design of their spreadsheet (as described on the teacher video The final column on the spreadsheet in the video shows MB per hour for each activity.</p> <p>Support: Should use the <i>Download: Data usage spreadsheet</i> to input data into; should compare at least two activities.</p> <p>Challenge: Should compare three different activities and complete the MB per hour column on the spreadsheet.</p>	<p>LO: To identify how data collection can improve city life</p> <p>Success Criteria: I can identify the meaning of the term 'Internet of Things'. I can recognise how the IoT has led to Big Data. I can link data collection to improvement in town planning.</p> <p>Main Event: Smart city presentation. Show slides 1-3 of <i>Presentation: Smart city</i> and explain to pupils that as more and more devices are connected to the internet, they create a huge bank of accessible data. This is referred to as 'Big Data'. Play the video What is a future city? on slide 4. The video is about the city of Glasgow, which is trying to become a 'smart city' Use slide 5 to explain how Glasgow is trying to save energy by attaching motion sensors to its street lighting.</p> <p>Support: May need help with reading the text on the screen. Could draw and annotate their smart cities</p> <p>Challenge: Can research new ways data could be used to improve towns and cities.</p>	<p>LO: To design a system for turning a school into a smart school.</p> <p>Success criteria: I can evaluate the methods of data transfer. I can apply Big Data/IoT principles to solve a problem. I can prepare a presentation.</p> <p>Main Event: Internet of things presentation. Put children into groups of three or four. Show slide 15 and ask pupils to create a presentation that shows how they would turn their school into a smart school. Explain that they will need to develop a pitch to persuade the headteacher of how and why Big Data and the Internet Of Things could help improve the school.</p> <p>Use slide 16 to explain that pupils can choose how to present this – using presentation software, a poster, a speech etc. They can either describe and research one specific way to improve the school, such as designing a motion-tracking wristband or it could be a project to think of a variety of ways the school could be improved, such as drawing a map of where to install sensors in the school to help reduce wasted energy.</p> <p>Support: Challenge:</p>	<p>LO: Success Criteria: Main Event: Support: Challenge:</p>	<p>LO: Success Criteria: Main Event: Support: Challenge:</p>

MEDIUM TERM PLAN

<u>Pullman</u>	<u>Horowitz</u>	<u>Pullman</u>	<u>Horowitz</u>	<u>Pullman</u>	<u>Horowitz</u>	<u>Pullman</u>	<u>Horowitz</u>	<u>Pullman</u>	<u>Horowitz</u>	<u>Pullman</u>	<u>Horowitz</u>
Aayat	Amelia	Aayat	Amelia	Aayat	Amelia	Aayat	Amelia	Aayat	Amelia	Aayat	Amelia
Ahmed Raza	Anas	Ahmed Raza	Anas	Ahmed Raza	Anas	Ahmed Raza	Anas	Ahmed Raza	Anas	Ahmed Raza	Anas
Ayana	Arooj	Ayana	Arooj	Ayana	Arooj	Ayana	Arooj	Ayana	Arooj	Ayana	Arooj
David O	Ayaan	David O	Ayaan	David O	Ayaan	David O	Ayaan	David O	Ayaan	David O	Ayaan
Kofi	Azhin	Kofi	Azhin	Kofi	Azhin	Kofi	Azhin	Kofi	Azhin	Kofi	Azhin
Kundhanasri	Cozmina	Kundhanasri	Cozmina	Kundhanasri	Cozmina	Kundhanasri	Cozmina	Kundhanasri	Cozmina	Kundhanasri	Cozmina
Lacie	Ethan	Lacie	Ethan	Lacie	Ethan	Lacie	Ethan	Lacie	Ethan	Lacie	Ethan
Lukmaan	Faatiha	Lukmaan	Faatiha	Lukmaan	Faatiha	Lukmaan	Faatiha	Lukmaan	Faatiha	Lukmaan	Faatiha
M.Faris	Hadi	M.Faris	Hadi	M.Faris	Hadi	M.Faris	Hadi	M.Faris	Hadi	M.Faris	Hadi
Mahnoor	Haroon	Mahnoor	Haroon	Mahnoor	Haroon	Mahnoor	Haroon	Mahnoor	Haroon	Mahnoor	Haroon
Maira	Ibraheem	Maira	Ibraheem	Maira	Ibraheem	Maira	Ibraheem	Maira	Ibraheem	Maira	Ibraheem
Mali	Laiba	Mali	Laiba	Mali	Laiba	Mali	Laiba	Mali	Laiba	Mali	Laiba
Mariam	Luis	Mariam	Luis	Mariam	Luis	Mariam	Luis	Mariam	Luis	Mariam	Luis
Maryam	Mario	Maryam	Mario	Maryam	Mario	Maryam	Mario	Maryam	Mario	Maryam	Mario
Mehr	Mohammed	Mehr	Mohammed	Mehr	Mohammed	Mehr	Mohammed	Mehr	Mohammed	Mehr	Mohammed
Mustafa	Musa	Mustafa	Musa	Mustafa	Musa	Mustafa	Musa	Mustafa	Musa	Mustafa	Musa
Omera	Noureddine	Omera	Noureddine	Omera	Noureddine	Omera	Noureddine	Omera	Noureddine	Omera	Noureddine
Rihan	Petra	Rihan	Petra	Rihan	Petra	Rihan	Petra	Rihan	Petra	Rihan	Petra
Rita	Rebeca	Rita	Rebeca	Rita	Rebeca	Rita	Rebeca	Rita	Rebeca	Rita	Rebeca
Safaa	Ruhi	Safaa	Ruhi	Safaa	Ruhi	Safaa	Ruhi	Safaa	Ruhi	Safaa	Ruhi
Urwa	Taybah	Urwa	Taybah	Urwa	Taybah	Urwa	Taybah	Urwa	Taybah	Urwa	Taybah
	Zahra Ka		Zahra Ka		Zahra Ka		Zahra Ka		Zahra Ka		Zahra Ka
	Zahra Kh		Zahra Kh		Zahra Kh		Zahra Kh		Zahra Kh		Zahra Kh