D&T MTP
Year 3 Autumn 2

Context							
Unit	Electronic Poster Linked to Science: Animals incl Humans						
Assessment	Evaluation of product at end of unit -						
Concepts - How does this unit fit in?	**Significant Designers / Products** Touch-screen displays		**Noteworthy Products in our Daily Lives** Interactive museum info-boards, touch-screen information, bus information, billboards, football		**Purpose and Use** To allow users to interact with an informative, electronic learning display tool.		
Kapow Lesson		**Learning Intention**	**DT Skills Skills Progression**	**Knowledge Concepts**	**GRADES**	**Local Art**	**Curriculum Links**
1	L1 Information Design	To research, analyse and understand the purpose of information design.	D12, D14				History
2	L2 Topic Research	To organise and sketch my initial ideas for my electronic poster that meet my design criteria.	D11, D12,D14, D15			Museum information boards	History,
4	L2 Topic Research	I can sketch my initial design, evaluate and select the final design.	D11, D12,D14, D15				
3	-	To apply my knowledge of assembly to build a simple circuit which includes a bulb.	D13, M11, M12				Science
5	L3 Design Development	To analyse my initial ideas and form a final design	D13, D14, D15				History, Science
5	L4 Electronic Poster Assembly	To apply my knowledge of simple circuits and construct my electric display board.	M11, M12, M13, M16				History, Science

6	-	To critique my own design and make suggestions of how to improve the product.	M11, M12, M14, M15, M16, E7				History, Science

Lesson 1	
Kapow Lesson	L1 Information Design
Learning Intention	To research, analyse and understand the purpose of information design. To explore how information is given to us
SOLO SC: Uni- Structural *Bronze*	I can verbally **name** examples of information design. I can recognise informative signs.
SOLO SC: Multi- Structural *Silver*	I can **explain** the purpose of information design. I can list different examples of signs around me.
SOLO SC: Relational *Gold*	I can research, **analyse** and explain the importance of information design. I can discuss what makes informative signs effective.
SOLO SC: Extended Abstract *Platinum*	I can **evaluate** the effectiveness of different information design. I can evaluate which signs are the most effective
Activity (What will the children do to demonstrate their understanding of the LI?)	Follow lesson plan outlined on Kapow and slides Encourage children to work in pairs or 3s. To enable idea generation, provide chn with some image stimuli - characters and backgrounds that they could possibly incorporate in their Prehistoric Britain / Villages, Towns & Cities or Human Skeleton information poster. (All resources provided on Kapow are centred around Romans. For ideas, see Kapow L3 Design Development resources, for an idea of what alternative will need to be provided for this lesson. Save these images in the Yr3 Autumn DT Planning folder, for later use in this unit.

Key Vocabulary for the lesson	Information Design Design Public
Curriculum Links	History
Resources	Sketchbooks, Electronic poster booklet, Observation sheet.

Lesson 2	
Kapow Lesson	L2 Topic Research
Learning Intention	To **organise** and sketch my initial ideas for my electronic poster that meet my design criteria. To explore design criteria.
SOLO SC: Uni- Structural *Bronze*	I can research and **identify** a topic to inform my design ideas. I can describe what my poster is for.
SOLO SC: Multi- Structural *Silver*	I can **verbally explain** why I have chosen key facts I can identify what is important to include on my poster.
SOLO SC: Relational *Gold*	I can **organise** and sketch my initial ideas for my electronic poster that meet my design criteria. I can explain why I have chosen certain design criteria
SOLO SC: Extended Abstract *Platinum*	I can **evaluate** the effectiveness of my ideas and make appropriate changes. I can justify which criteria is the most important to include on my poster.
Activity (What will the children do to demonstrate their understanding of the LI?)	Follow lesson plan outlined on Kapow. Chn recall 5 facts about information design - to share with CT. Recall examples of information design that they have seen in their locality.

	Discuss information design in museums; their use and importance. **Design Brief** Chn to know that they will be creating information design for an exhibit featuring the Human Skeleton. That their design must have facts about their chosen part/s of the skeleton which will inform a museum visitor and will feature a bulb, which should draw the attention of the viewer. **Success (Design) Criteria** Discuss the importance of a success criteria. Create a class Success Criteria outlining what an effective final product should have. **Research topic** Chn to create the text which will feature on their information poster. Chn to work in pairs and decide which bone/s of the human body they will feature on their design. Choose from: ● Skull ● Ribcage ● The skeleton Watch DrBinos video (watched previously in Science) and pull out key facts about Activity on large strips of paper - describe the skull/ribcage without using the words 'skull', 'skeleton' or 'ribcage'. Write on large paper. Create class shared write for each body structure. **Stretch**: Describe another bone in the human skeleton eg: Ulna & Radius, etc. **Lesson 2a** Chn will create a variety of initial design ideas, experimenting with the poster layout. Using evaluation, chn will choose their favoured design and create a final design. Ensure all research ideas are recorded in sketchbooks and encourage the use of neat handwriting.
Key Vocabulary for the lesson	Information Design Design criteria Research Initial ideas Sketch Bulb
Curriculum Links	History / Science
Resources	Sketchbooks, Research materials (books / chromebooks, etc), CT example of final product which uses a simple circuit and bulb.

Lesson 3	
Kapow Lesson	-
Learning Intention	To **apply** my knowledge of assembly to build a simple circuit which includes a bulb. To explore simple circuits
SOLO SC: Uni- Structural *Bronze*	I can **name** parts of a simple circuit. I can identify some products that use a circuit.
SOLO SC: Multi- Structural *Silver*	I can **describe** how to connect a cell, wires and a bulb to form a simple circuit. I can build a circuit using a cell, crocodile clips and a bulb.
SOLO SC: Relational *Gold*	I can **apply** my knowledge of assembly to build a simple circuit which includes a bulb. I can explain how a simple circuit works.
SOLO SC: Extended Abstract *Platinum*	I can **construct** a more complex circuit which uses two bulbs. I can explain why circuits are used in information design.
Activity (What will the children do to demonstrate their understanding of the LI?)	Allow chn the time during this lesson to discover how to connect and construct a simple circuit. (Circuits will be revisited in following years, in Science) Show chn wires, crocodile clips, bulbs. Discuss how x1 'battery' is known as a Cell and more than 1 cell is called a battery. Give chn pictures of these items / a picture of a simple circuit, and to label. Model how to connect the wires, cell and bulb, so that the light shines. Allow chn time in pairs / groups, to connect and create a simple circuit. Some chn may need help with crocodile clips however, encourage peer support - CT support should be minimal. Extend chn to think about what they may need to do, if they wanted to use 2 bulbs in the circuit. Allow them to experiment and discover. Further extension: **Q**: How will you attach the circuit to the 3D information poster? **Q**: How will you hide the wires but still let your audience see the bulb? (Chn should think about tape and cutting a small hole in the poster to allow the bulb to show through, while the wires remain on the surface behind. Ensure all ideas/labelling is recorded in sketchbooks and encourage the use of neat handwriting.

Key Vocabulary for the lesson	Information Design Design criteria Initial ideas Sketch Circuit, Wires, Crocodile Clip, Cell / Battery, Bulb, (circuit components) Connect
Curriculum Links	History, Science
Resources	Sketchbooks, images of circuit components for labelling, wires, cells, crocodile clips, bulbs

Lesson 4	
Kapow Lesson	L3 Design Development
Learning Intention	To analyse my initial ideas and form a final design To explore initial ideas for an electrical poster
SOLO SC: Uni- Structural *Bronze*	I can talk about my initial design ideas. I can describe what my poster is for.
SOLO SC: Multi- Structural *Silver*	I can respond to peer feedback. I can draw 2 different ideas for my poster.
SOLO SC: Relational *Gold*	I can **analyse** my initial ideas and form a final design I can choose a final design for my poster which achieves my design brief.
SOLO SC: Extended Abstract *Platinum*	I can **evaluate** my final design against the design criteria. I can evaluate my final design against the design criteria.
Activity (What will the children do to demonstrate their understanding of the LI?)	Follow lesson plan outlined on Kapow. Chn will peer assess ideas and through discussion and self review, will evaluate and create a final design, which will be used as reference when they construct their information posters, next lesson.

	Images resources found by CT in Lesson 1, of Prehistoric Britain (see Lesson 1 above) should be shown to allow chn the opportunity to revise their design ideas and to inspire creativity. Extend (depending on time): If chn are able to evaluate and finalise their final product design, allow chn to begin constructing. Ensure all ideas are recorded in sketchbooks and encourage the use of neat handwriting.
Key Vocabulary for the lesson	Self-assessment Peer assessment Feedback Develop Initial ideas Final design Design cycle
Curriculum Links	History, Science
Resources	Sketchbooks, Prehistoric Britain characters and backgrounds, circuit components, masking tape, scissors, thin card

Lesson 5	
Kapow Lesson	L4 Electronic Poster Assembly
Learning Intention	To apply my knowledge of simple circuits and construct my electric display board.
SOLO SC: Uni- Structural *Bronze*	I can **follow a simple procedure** to mount images to card, to make it stronger.
SOLO SC: Multi- Structural *Silver*	I can **combine** components, including a bulb, to form a simple circuit
SOLO SC: Relational *Gold*	I can **apply** my knowledge of simple circuits and construct my electric display board.
SOLO SC: Extended Abstract *Platinum*	I can test and **evaluate** my electric display board.

Activity (What will the children do to demonstrate their understanding of the LI?)	Follow lesson plan outlined on Kapow. Watch videos to see construction. Chn will construct and build their information poster / electric display board. Provide Prehistoric Britain character and background images from previous lessons, which chn can cut out and stick to card. Encourage neat working, in order to produce an aesthetically pleasing final product. During the process chn may alter and adjust their product, as they encounter and solve design problems and challenges. Encourage resilience and teamwork through communication - all team members should be active during the task. Adult intervention should be minimal. If chn are unable to complete their builds during the session, allow some time during the next lesson to finalise and complete. Extend: Chn who researched their own ideas may want to use their own found images in their design. Please have allowed time before the lesson to print these images ready for use. Encourage chn to record design changes / amendments, in their sketchbook, on their final design - encourage the use of neat handwriting.
Key Vocabulary for the lesson	Electric system, electric product, circuit, circuit component, bulb, battery/cell, crocodile clips, wires
Curriculum Links	History, Science
Resources	Sketchbooks, Prehistoric Britain characters and backgrounds, circuit components, masking tape, scissors, thin card

Lesson 6	
Kapow Lesson	-
Learning Intention	To **critique** my own design and make suggestions of how to improve the product.
SOLO SC: Uni- Structural *Bronze*	I can **name** electric components of my information poster.
SOLO SC: Multi- Structural	I can **describe** how my poster will teach the audience about Prehistoric Britain.

Silver	
SOLO SC: Relational *Gold*	I can **critique** my own design and make suggestions of how to improve the product.
SOLO SC: Extended Abstract *Platinum*	I can **evaluate** my product and compare my design to my peers.
Activity (What will the children do to demonstrate their understanding of the LI?)	Allow time during the lesson, for chn to complete their information posters. Set out information posters (possibly in hall space) and encourage chn to walk around and view each other's work. Chn to choose their favourites and to be prepared to give verbal reasons as to why they believe their friend's design is effective in educating an audience about Prehistoric Britain. Circulate again, this time to make suggestions of how the design could be improved - CT to demonstrate positive ways in which these comments can be said. **Take photos of the final products, print and these must be stuck into sketchbooks.** Chn to complete the 'Letter to Gus' in the design pack (last page). Encourage neat handwriting. Final products (and photocopies of some evaluation 'Letters to Gus' can be displayed on corridor display boards.
Key Vocabulary for the lesson	Electric system, electric product, design, initial idea, final idea
Curriculum Links	History, Science
Resources	Final product, Letter to Gus (in activity pack in sketchbook)

Lesson 6	
Assessment Think! Question	**'The impact of my information poster would be different if I used a buzzer instead of a bulb.'**
Tasks	See lesson outline above.

Key Vocabulary for the lesson	
Curriculum Links	
Resources	