## Pioneer Federation Medium term plan UPKS2 Cycle 2, Term 6 D.T



Subject: [	D.T				
Key Conc	ept/ Theme: Raiders or settlers: ho	w should we remember the Vikings?			
Prior Lear	rning links: Cycle 1 What Makes a G	Great Explorer? - Plastic sculptures <b>Cycle 2</b> - What Ma	akes a War? - Shelter building		
Vocabula	ry: longboat, keel, oars, hull, figure	head, Vikings, buoyancy, properties, sail.			
School sp	ecific areas to cover (Add in any lo	ocal areas of study, trips and people)			
СР		EH	SMV	PM	
1.	Prior learning reconnection (yea	ection (year group, cycle & term): 5/6 Cycle 2 Term 1			
	LO: Today I am learning about the history of Viking longboats  Activity: Introduce the history of the Viking longboats. What were they? Where were they from? What features do they have and why? Explore the impact of the design and how they made the Vikings so successful at sea. Children can work in pairs or independently to research and create a fact page explaining the different parts of the boat and their importance e.g. the figurehead made to intimidate the enemy.				
2	Reconnection: Can you explain the importance of the different parts of a longboat?  LO: Today I am designing and planning my longboat  Activity: Today the children can create their designs. Ask them to consider which materials they will make it from (what materials would they like to have available and what will actually be available?) Check children are considering which materials the main body will need to be made from, to ensure it remains buoyant in water. When designing their figurehead, ask them to consider what animal they will design for the prowl of the boat and why? The children will need detailed annotated sketches completed by the end of the lesson, so they are ready to create their models.				
3 and 4	Reconnection: Share designs and creative ideas. Why have the children made these design decisions?  LO: Today I am making my longboat.  Activity: Children to make their longboat using the materials they planned in their designs. They can adapt as necessary. For example, in the making process, they might question if plastic bottles or cartons better suit the shape they are trying to create for the hull of their boat. Additionally, they will need to consider the weight distribution as this could cause the boat to capsize. Will they need to add a buoyancy aid underneath the longboat to support it? Tell them they do not need to rush as they have two lessons to do this. It might be worth blocking out an afternoon to complete the project so they are ready to test the boats in the next lesson.				

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5 and 6

Reconnection: Allow children chance to look at each other's designs. Do they have any advice for each other?

LO: Today I am testing and evaluating my longboat

Activity: Children to test the buoyancy and effectiveness of their longboat. Ensure the children have somewhere they can test their models in water. If you have small fans, the children could use these behind the sail to propel the longboat through the water. Children to self- evaluate throughout the process. Do they think their longboat would be successful in a real battle? Why? Which features do they feel work the best? How have they effectively distributed the weight to ensure the boat stays upright? If they have had to make adaptions what were the reasons? Could they have foreseen them?

Take photographs of the children testing their designs. They can then annotate the photos with their thoughts and any future adaptions.

## **End points:**

To know a variety of skills and techniques used in construction.

To know how a range of structures have been strengthened building on from previous techniques utilised.

To know which materials will be most effective for different requirements and to know how to evaluate the effectiveness of chosen materials and consider adaptions for future designs.