

Viking Science : Science : Year 5/6

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To learn about the science behind some Viking food production methods, and find out about the modern production of dairy foods.	Children will find out about foods produced by Vikings and consider how and why they processed milk to produce other foods. They may then either make butter – developing a method, then observing and recording changes – or conduct research and present findings about modern dairy food production methods.	<ul style="list-style-type: none"> Can children use prior knowledge and/or secondary sources to suggest ways in which foods are produced? Can children make observations and record data accurately? Can present findings from enquiries or secondary sources? 	<ul style="list-style-type: none"> Slides Worksheet 1A/1B/1C Double cream, jam jars, sieves, mixing bowls, dessert spoons, chopping boards, foil, plastic food containers Challenge Card 1 (FSD...? activity only)
Lesson 2	To identify, describe and classify micro-organisms.	Children will learn a little about how micro-organisms are important in the production of fermented foods, going on to find out more about what micro-organisms are, where they are found, how they are classified and how they may be helpful or harmful. They may then either continue to conduct research, or undertake a practical investigation about yeast.	<ul style="list-style-type: none"> Can children share prior knowledge about micro-organisms? Can children theorise, formulating answers to questions about micro-organisms? Can children present findings about micro-organisms, based on their scientific enquiries? 	<ul style="list-style-type: none"> Slides Challenge Card 2 Micro-organism Question Cards Internet access Big sheets of paper (for mind maps) Yeast Experiment 2 (FSD...? activity only)
Lesson 3	To devise and conduct tests to compare the effectiveness of glue, reporting findings.	Children will consider ways in which adhesives are used all around us, then learn about how Vikings made glue from milk. They may then either make and test Viking milk glue, or devise a fair test to compare the strengths of a variety of adhesives.	<ul style="list-style-type: none"> Can children devise and conduct a test of the effectiveness of glue? Can children interpret their results, reporting findings? Can children suggest ways of improving a test, or altering a variable, to learn more? 	<ul style="list-style-type: none"> Slides Challenge Card 3 Teacher's Notes Glues, glue testing materials and equipment (see Teacher's Notes) Viking Glue 3 (FSD...? activity only) Milk glue materials and equipment (see Viking Glue 3; FSD...? activity only)
Lesson 4	To plan and conduct scientific enquiries, presenting findings.	Children will make simple oil lamps, then consider what scientific questions can be asked about them. They may then either devise scientific enquiries to try and answer their questions, or make and test a clay oil lamp of their own design.	<ul style="list-style-type: none"> Can children raise scientific questions based on their observations of phenomena? Can children plan and conduct appropriate scientific enquiries to try and answer a question? Can children interpret findings of a scientific enquiry and raise further questions? 	<ul style="list-style-type: none"> Slides Worksheet 4A/4B/4C Teacher's Notes Oil lamp equipment & materials (see Teacher's Notes) Test Your Theory! sheet (FSD...? activity only) Clay (FSD...? activity only)
Lesson 5	To plan and conduct scientific enquiries, presenting findings.	Children will learn about Viking uses of absorbent natural materials, then examine, identify and learn about the materials used in modern, disposable nappies. They may then either devise and conduct tests on disposable nappies, or carry out a fair test, comparing the absorbency of a variety of materials.	<ul style="list-style-type: none"> Can children ask scientific questions about the properties of a product? Can children devise scientific enquiries to answer scientific questions? Can children interpret and present their findings in a way that others can understand? 	<ul style="list-style-type: none"> Slides Worksheets 5A/5B/5C Teacher's Notes Nappies, zip-lock bags, measuring jugs/cylinders, digital scales, bowls/trays Worksheet 5D (FSD...? activity only)
Lesson 6	To use observations and test results to make predictions and to set up further tests on a model boat.	Children will consider the forces acting on a boat in a variety of conditions, then devise and conduct scientific enquiries, either to determine how hull shape affects buoyancy, or how friction acting on a boat dragged over land can be reduced.	<ul style="list-style-type: none"> Can children devise scientific enquiries to try and answer a question? Can children improve their methods of enquiry based on observations? Can children interpret and present their findings? 	<ul style="list-style-type: none"> Slides Teacher's Notes Worksheets 6A/6B/6C Challenge Card 6 (FSD...? activity only) <p><i>Refer to Teacher's Notes for additional resources for Main Activity and FSD...? activity</i></p>