Lesson Plans and Learning Resources

Lower Key Stage 2

Curriculum Links

Science

- Asking relevant questions and using different types of scientific enquiries to answer them
- Setting up simple practical enquiries, comparative and fair tests
- Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
- Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
- Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
- Identifying differences, similarities or changes related to simple scientific ideas and processes
- Using straightforward scientific evidence to answer questions or to support their findings.

Animals, including humans

- Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat
- Identify that humans and some other animals have skeletons and muscles for support, protection and movement.

Mathematics - Measurement

- Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)
- Compare durations of events [for example to calculate the time taken by particular events or tasks].

Statistics

- Interpret and present data using bar charts, pictograms and tables
- Solve one-step and two-step questions [for example, ‘How many more?’ and ‘How many fewer?’] using information presented in scaled bar charts and pictograms and tables.

UNIVERSITY OF LEICESTER

Department of Health Sciences

Lesson 1 – Health Research and Measurement

Duration: 1 hour

Learning Objectives	
LO1	I know what a health researcher does and how we can measure health.
LO2	Choose a health research question and set up my enquiry
LO3	I can collect data to answer my research question.

Learning across the curriculum	Resources
• Science • Mathematics	• Powerpoint • handouts

Time & **Learning Objectives**	**Pupil learning activities**	**Teaching points/ strategies / teacher role** *including reference to how tasks have been differentiated*	Organisation and risk assessment.	Assessment for learning strategies *Formal and informal*
5 mins	Children view powerpoint slides with aims and objectives.	Instructor to introduce themselves and explain where they are from. Lesson aims and objectives to be clearly explained to children	Powerpoint slide 1 and 2	
5 mins LO1	Children discuss what is health?	What is health? How do you know if you are being healthy? Who tells you what is healthy? How do your parents, teachers, dentists or doctors know what is healthy? Explain that health researchers work in lots of different places including universities and hospitals. They gather information about people to help us know what is healthy.	Powerpoint slide 3	Hands up questions
5 mins LO1	Children think about ways we might measure health.	Today we are going to be health researchers. We are going to collect some information about our class and we will use that to promote our health message to the school.	Powerpoint slide 4	Talking pairs

		What sort of things do you think we might measure to do with health? Think about what a dr or school nurse might do? Does anyone wear glasses or hearing aid? How are these measured? Have any of you got younger brothers or sisters? Have they seen a health visitor? What sort of things might they measure? How do we measure medicine?		
2 mins LO2	Children discuss in pairs/ groups what they know about being healthy. Then feedback to instructor.	As researchers we start with what we know. What do you already know about being healthy? Scribe children's ideas such as eat 5 a day, avoid sugary food/ drinks, exercise, brush teeth, eat different coloured fruit and veg.	Powerpoint slide 5	Talking pairs/ groups Feedback by hands up.
3 mins LO2	Children think about research questions.	Now we know what being healthy means we are going to do some research into this. We are changing what we already know into research questions. We need to make sure our question is measurable and gives us the information we want. I have done 2 for you. What questions could we ask for the other pictures? Facilitate discussion of different methods of measurement. Ideas around measuring exercise and diet. Include ideas such as recording information on diet needs definitions: e.g. number of fizzy drinks – it is key we define "a drink" number of cups – what is "a cup"? pieces of fruit: what is a piece of fruit?	Powerpoint slide 6	Hands up

		Show different size bottles/ cups/ spoons to demonstrate.		
25 mins LO3	Use the portion guides and worksheet to find out how many portions of fruit and veg each person ate yesterday	As a class we are going to ask the research question: How many portions of fruit and veg did you eat yesterday? We will do this because health researchers and the Government have already given us a guide of what a portion of fruit or veg is. - show handout. How can we find out the answer and how can we record it? Guide children to think of a questionnaire and record the answers on a tally chart. Extension: children can use the data handling sheets to begin to think about presenting data	Powerpoint slide 7 Handouts	
5 mins LO3	Children look at their data to see any patterns.	Have we answered how many portions of fruit and veg did people eat? Quickly fill out the table on the board. Can we compare that with what is recommended? Are we the same, worse or better? How could we use this information? Do we think everyone tells the truth when they answer these sorts of questions? Explain these are issues that health researchers face.	Powerpoint slide 8	
5 mins	Children view powerpoint slides with aims and objectives.	Ask children to tell a partner what they have learnt Use questions to see what children can remember. E.g what does a health researcher do? What sort of things do we measure? How can we measure?	Powerpoint slide 9	Self evaluation

Lesson evaluation	
LO1	
LO2	
LO3	
Optional extras:	Use the data for further data handling lessons, making bar charts, pictograms etc. Homework – children complete their own 5 a day chart every day for a week Further discussions on what is a healthy lifestyle.