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| LKS2 Working Scientifically – Y3 | | |
| Questions | Test | Observe |
| **Asking relevant questions and using different types of scientific enquiries to answer them.**  Explore their own ideas about ‘what if….?’ scenarios e.g. humans did not have skeletons.  Begin to understand that some questions are testable/ can be tested in the classroom and some cannot.  Within a group suggest relevant questions about what they observe and about the world around them. | **Setting up simple practice enquiries, comparative and fair tests.**  Help to decide about how to set up a simple fair test and begin to recognise when a test is not fair.  As a group, begin to make some decisions about the best way of answering their questions.  With support/as a group, set up simple practical enquiries incl. comparative and fair tests e.g. make a choice from a list of at least one variable that needs to be kept the same when conducting a fair test.  Find/suggest a way to compare things e.g. materials, magnets. | **Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.**  Observe and record relationships between structure and function (Y3/4).  Observe and record changes /stages over time (Y3/4).  Explore / observe things in the local environment / real contexts and record observations (Y3/4).  Record observations/explorations/ processes using simple scientific language.  Learn how to use new equipment, e.g. data loggers.  Explore observe with increased accuracy using a hand lens or microscope. |
| Data | Record | Report |
| **Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions.**  Collect data from their own observations and measurements, using notes/ simple tables/standard units.  Help to make some decisions about what observations to make, how long to make them for and the type of simple equipment that might be used.  Make simple accurate measurements using whole number standard units, using a range of equipment.  Gathering 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.**  Record and present findings using simple scientific language and vocabulary, including discussions, oral and written explanations, notes, drawings annotated, pictorial representations, labelled diagrams, simple tables, bar charts [using ranges and intervals (scales) chosen for them] displays or presentations.  Record, classify and present data in a variety of ways to help in answering questions.  Communicate their findings in ways that are appropriate for different audiences. (Y3/4). | **Report on findings from enquiries, including oral and written explanations, displays or presentations of result and conclusions.**  Say whether what happened was what they expected and notice any odd results that seem odd.  Begin to recognise when a test is not fair and suggest improvements. |
| Conclude & Predict | Similarities & Differences | Evidence |
| **Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.**  Describe and compare the effect of different factors on something.  With help, look for changes and patterns in their observations and data.  Use their results to consider whether they meet predictions.  Use their own experience and some evidence or results to draw simple conclusions and answer questions. | **Identifying differences, similarities or changes related to simple scientific ideas and processes.**  Compare and contrast functions, diets, teeth, changes over time.  Record similarities and differences.  Decide ways and give reasons for sorting, grouping, classifying, identifying things/objects, living things, processes or events based on specific characteristics. | **Using straightforward scientific evidence to answer questions or to support their findings.**  Use their own experience and some evidence or results to draw simple conclusions and answer questions.  Talk about and record their findings using simple scientific language.  Explain why things have happened. |
| Research |
| Create/invent design something based on what they have found out applying both research and/or practical experiences (Y3/4).  Find out about the work of famous scientists historical and modern day (Y3/4).  Finding things out using secondary sources of information (Y3/4). |