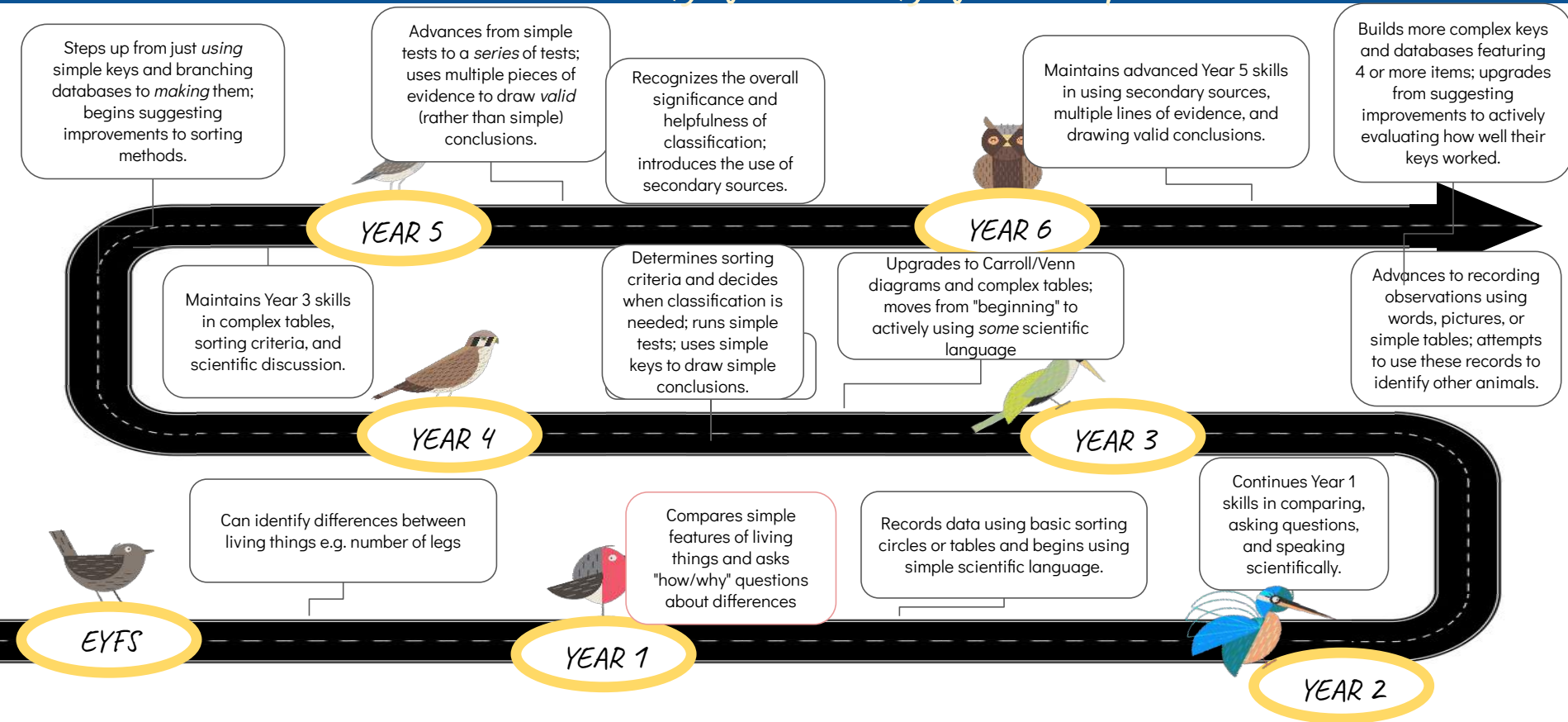


Science Identifying and Classifying Road Map



Ready



Respectful



Safe



Kind

Science Fair Testing Road Map

Independently planning fair tests and posing questions, expanding data recording to include charts alongside tables, and suggesting ways to improve their tests.

The focus shifts from general fairness to scientific precision, accuracy, and sophisticated variable management.

Identifying exactly which variables to change, measure, and keep the same; choosing equipment for maximum accuracy; and drawing valid conclusions backed by scientific knowledge.

Students achieve mastery by combining precise execution with critical, reflective evaluation of their experimental design.

Securing accurate measurements and data records while critically evaluating their own methods—specifically identifying which variables were difficult to control.

YEAR 5

YEAR 6

Students take a major leap into independence, removing the need for constant adult scaffolding during test setup.

Continuing to pose fair test questions with help, utilizing tables to record data, and explaining simple causal links with scientific vocabulary.

This stage serves to consolidate and reinforce the collaborative investigation skills introduced in the previous year.

Helping to plan fair tests, choosing appropriate equipment, recording findings systematically in tables, and drawing basic conclusions.

YEAR 4

YEAR 3

Driven by natural curiosity, children use their senses to explore how things behave and carry out highly supported, simple tests.

Students move from general observation to identifying basic cause-and-effect relationships by asking "how" and "why".

Beginning to use simple scientific language, using non-standard units to record data, and evaluating whether a test was "fair" with adult guidance.

Enquiry becomes more structured as students actively participate in collaborative planning and data organization.

EYFS

YEAR 1

YEAR 2

Asking basic questions with help, using simple equipment to observe, making basic records, and talking about whether actions made a difference.



Ready



Respectful



Safe



Kind

Science Research Road Map

Gathers information in multiple ways and records findings in their own words. Explains data meanings using scientific language and suggests ways to improve their research methods.

Advances from suggesting method improvements to independently selecting relevant secondary sources and evaluating overall research success.

Independently recognizes and selects secondary sources to answer questions. Evaluates how effectively their research answered questions and explains results using scientific language.

Culminates in critical data analysis, recognizing bias, formatting formal presentations, and understanding the limitations of scientific answers.

Selects secondary sources, integrates data, tracks how data was obtained, and presents findings in suitable formats. Critically evaluates research, spots data bias or opinion over fact, and explains outcomes using scientific knowledge while acknowledging that some questions lack definitive answers.

YEAR 5

YEAR 6

Shifts from basic information gathering to interpreting data meanings, rewriting findings in their own words, and suggesting process improvements.

Locates specific information using sources, presents it in different ways, and draws conclusions. Uses external data sets and describes how things work.

Transitions from basic media use to intentionally navigating information sources, utilizing external data, and drawing conclusions.

Uses simple books or electronic media, asks questions about how things work, and records findings using words and pictures. Expresses opinions on findings, evaluates if a source was useful, and begins using basic scientific language.

YEAR 4

YEAR 3

Shows curiosity, listens carefully, and uses pictures, books, or electronic media to find answers. Asks questions with help and talks to people about how things work and what they found out.

Moves from exploring surroundings to actively suggesting ways to find information.

Makes guided suggestions on how to find things out.

Advances from making suggestions to independently using simple media, recording findings, and evaluating source usefulness.

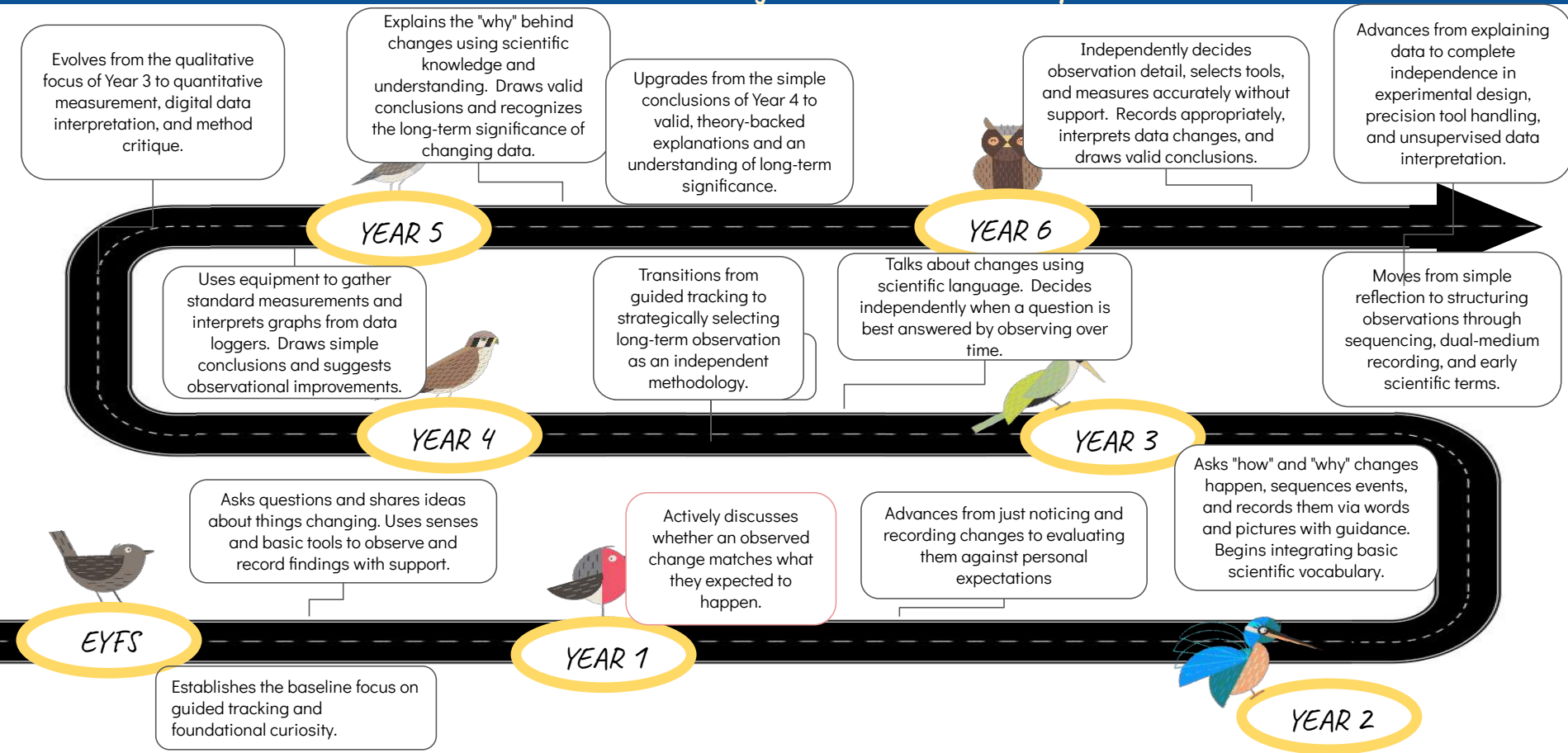
EYFS

YEAR 1

YEAR 2



Science Observing Over Time Road Map



Ready



Respectful



Safe



Kind

Science Pattern seeking Road Map

