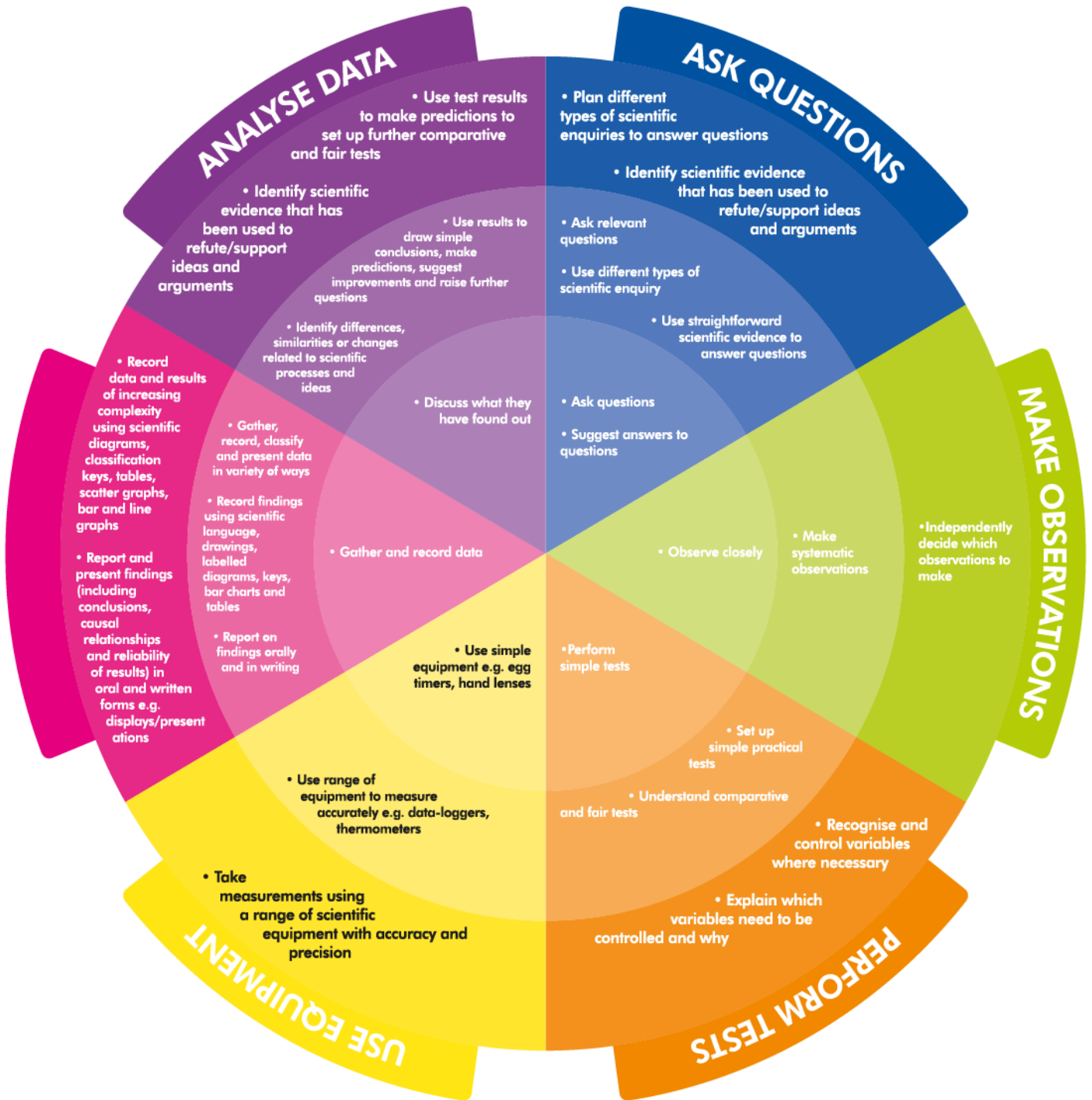


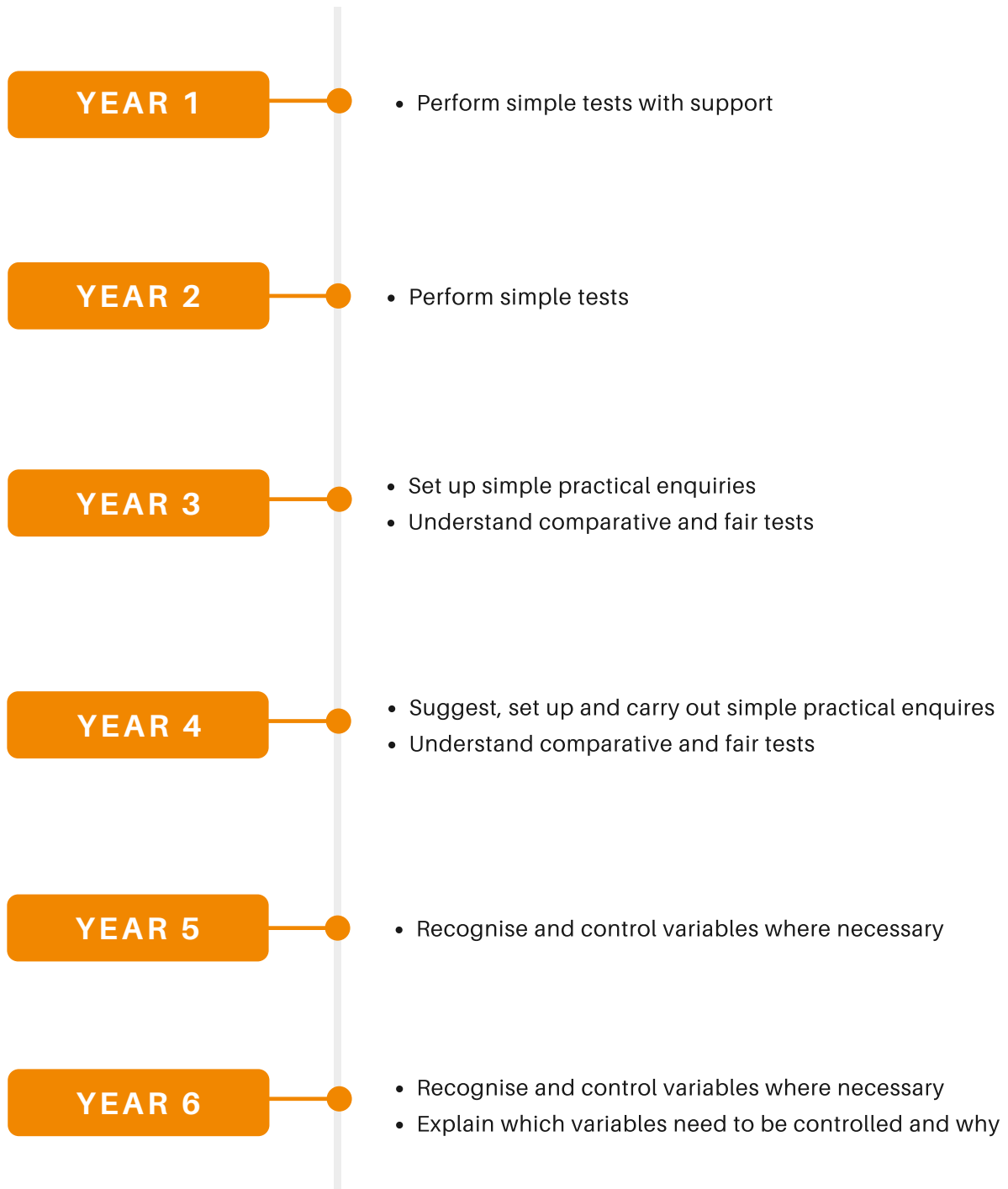


# THE CONCENTRIC SCIENTIST



# PERFORM TESTS

Intent (Standardised Objectives)



# MAKE OBSERVATIONS

Intent (Standardised Objectives)

YEAR 1

- Start to observe closely

YEAR 2

- Observe closely

YEAR 3

- Develop skills of systematic observation

YEAR 4

- Make systematic observations

YEAR 5

- Independently decide which observations to make

YEAR 6

- Independently decide which observations to make

# GATHER DATA

## Intent (Standardised Objectives)

### YEAR 1

- Begin to gather and record data simply using pictures and words

### YEAR 2

- Gather and record data using diagrams, words and charts

### YEAR 3

- Gather, record and present data in variety of ways eg drawings, labelled diagrams, charts
- Report on findings orally and in writing using scientific language

### YEAR 4

- Gather, record, classify and present data in a wide variety of ways eg drawings, labelled diagrams, charts
- Report on findings orally and in writing using scientific language to answer questions

### YEAR 5

- Record data/results of increasing complexity using diagrams, classification keys, tables, bar and line graphs
- Report and present findings from enquiries, examining causal relationships and reliability of results

### YEAR 6

- Decide how to record data/results of increasing complexity using diagrams, classification keys, tables, scatter graphs, bar and line graphs
- Report and present findings from enquiries, examining causal relationships and reliability of results

# ASK QUESTIONS

## Intent (Standardised Objectives)

### YEAR 1

- Start to ask and suggest answers to simple scientific questions
- Use first-hand practical experiences to find answers

### YEAR 2

- Ask and raise their own scientific questions
- Use first-hand practical experiences to find answers

### YEAR 3

- Ask relevant scientific questions and suggest how to answer eg *practical test vs secondary sources*
- Develop different types of scientific enquiry

### YEAR 4

- Generate and answer scientific questions using evidence
- Select most appropriate type of scientific enquiry

### YEAR 5

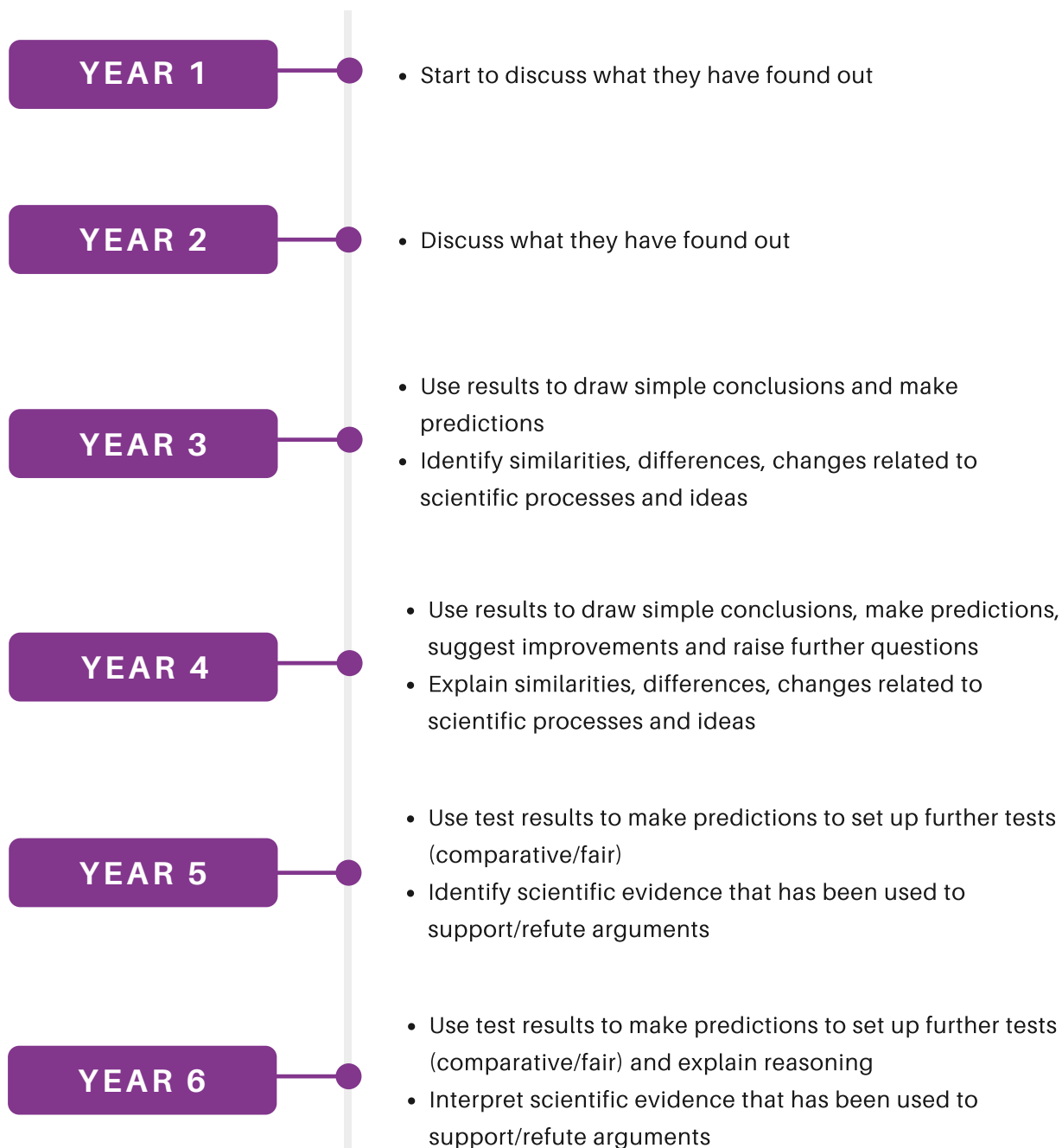
- Use science experiences to plan different types of enquiry

### YEAR 6

- Plan different types of scientific enquiry in order to answer questions
- Use science experiences to explore ideas and raise different types of question

# ANALYSE DATA

## Intent (Standardised Objectives)



# USE EQUIPMENT

## Intent (Standardised Objectives)

YEAR 1

- Begin to use simple equipment eg *egg timers, hand lenses*

YEAR 2

- Use simple equipment eg *hand lenses, egg timers*

YEAR 3

- Use range of equipment to measure accurately eg *data-loggers, thermometers*

YEAR 4

- Confidently use range of equipment to measure accurately eg *data-loggers, thermometers*

YEAR 5

- Take measurements using a range of scientific equipment with accuracy and precision

YEAR 6

- Take measurements using a range of scientific equipment with accuracy and precision, taking repeat readings where appropriate