

Action VERBS

Definitions + Related Learning Outcomes

Analyse - Study or examine something in detail, break down something in order to bring out the essential elements or structure; identify parts and relationships, and interpret information to reach conclusions
NoS 4 PW 6

Discuss - Offer a considered, balanced review that includes a range of arguments, factors or hypotheses: opinions or conclusions should be presented clearly and supported by appropriate evidence
EaS 8 PW 4 PW 8 BW 9

Investigate - Observe, study, or make a detailed and systematic examination, in order to establish facts and reach new conclusions
CW 1 CW 6 CW 7
CW 8 PW 3 BW 1 BW 5 BW 7

Apply - Select and use information and/or knowledge and understanding to explain a given situation or real circumstances
NoS 5

Evaluate (data) - Collect and examine data to make judgments and appraisals; describe how evidence supports or does not support a conclusion in an inquiry or investigation; identify the limitations of data in conclusions; make judgments about ideas, solutions or methods
NoS 2 NoS 6
NoS 8 E&S 7 CW 10 BW 6 BW 10

Justify - Give valid reasons or evidence to support an answer or conclusion
NoS 4

Appreciate - Recognise the meaning of; have a practical understanding of
NoS 1 NoS 10 BW 10

Evaluate (ethical judgement) - Collect and examine evidence to make judgments and appraisals; describe how evidence supports or does not support a judgement; identify the limitations of evidence in conclusions; make judgments about ideas, solutions or methods
NoS 2 NoS 6
NoS 8 E&S 7 CW 10 BW 6 BW 10

Measure - Quantify changes in systems by reading a measuring tool
PW 2

Calculate - Obtain a numerical answer, showing the relevant stages in the working
PW 2

Examine - Consider an argument or concept in a way that uncovers the assumptions and relationships of the issue
EaS 8 BW 6

Model - Generate a mathematical representation (e.g., number, graph, equation, geometric figure); diagrams; physical replicas for real world or mathematical objects; properties; actions or relationships
EaS 2 EaS 4 CW 2 CW 3

Classify - Group things based on common characteristics
CW 4

Explain - Give a detailed account including reasons or causes
NoS 3 PW 6
BW 3 BW 8 BW 9

Organise - To arrange; to systematise or methodise
NoS 7

Compare - Give an account of the similarities and/or differences between two (or more) items or situations, referring to both/all of them throughout
NoS 2 EaS 3

Explore - Observe, study, in order to establish facts
EaS 2 BW 2

Outline - To make a summary of the significant features of a subject
BW 3

Conduct - To perform an activity
NoS 3 NoS 6 BW 5

Formulate - Express the relevant concept(s) or argument(s) precisely and systematically
EaS 6

Plan - To devise or project a method or a course of action
NoS 3

Consider - Describe patterns in data; use knowledge and understanding to interpret patterns; make predictions and check reliability
CW 9

Identify - Recognise patterns, facts, or details; provide an answer from a number of possibilities; recognise and state briefly a distinguishing fact or feature
NoS 4 PW 2

Produce - To bring into existence by intellectual or creative ability
NoS 4

Demonstrate - Prove or make clear by reasoning or evidence; illustrating with examples or practical application
CW 2

Illustrate - Use examples to describe something
EaS 2 EaS 7 CW 9

Research - To inquire specifically, using involved and critical investigation
NoS 6 NoS 9 EaS 6 PW 4 PW 8 BW 5

Describe - Develop a detailed picture or image of, for example, a structure or a process; using words or diagrams where appropriate; produce a plan, simulation or model
EaS 1 EaS 4 EaS 5 CW 2
CW 3 PW 7 BW 2 BW 4 BW 7

Interpret - Use knowledge and understanding to recognise trends and draw conclusions from given information
EaS 3

Review - To re-examine deliberately or critically, usually with a view to approval or dissent; to analyse results for the purpose of giving an opinion
NoS 5

Design - To conceive, create and execute according to plan
NoS 3 PW 5 PW 7

Recognise - Identify facts, characteristics or concepts that are critical (relevant / appropriate) to the understanding of a situation, event, process or phenomenon
NoS 2

Develop - To evolve; to make apparent or expand in detail
EaS 4 CW 2

Understanding about Science
Investigating in Science
Communicating in Science
Science in Society

Building Blocks
System & Interactions
Energy
Sustainability

NoS = Nature of Science
EaS = Earth & Space
CW = Chemical World
PW = Physical World
BW = Biological World

Adapted from the Junior Cycle Science Curriculum Specification available at www.curriculumonline.ie

More science resources available at www.jct.ie/science/science.php