

Bloom's Revised Taxonomy for Learning Objectives

REMEMBER	UNDERSTAND	APPLY	ANALYSE	EVALUATE	CREATE
To repeat or list information ¹ or procedures ²	To explain, paraphrase, organise, or exemplify information ¹ or procedures ²	To apply procedures ² , theories or skills to a known or similar situation ³	To break a complex situation ³ into parts or clusters ⁴ , and/or to identify what procedures ² , ideas ⁷ or relationships are applicable.	To assess information ¹ , procedures ² , tools, processes, skills, and/or products ⁵ on their quality ⁶ and/or significance in order to reach a conclusion, advice, decision, or proof.	To create original ideas ⁷ , procedures ² , tools, or products ⁵

¹**Information** e.g. facts, terms, definitions/concepts, ideas, theories

²**Procedures** e.g. formulas, techniques, procedures, methodologies, rules, experiments, analyses

³**Situations** e.g. problem, experiment, data, process, research question, literature, list of specifications, computer program, or other information

⁴**Parts or clusters** e.g. causes and consequences, advantages and disadvantages, motives, stakeholders, and relations

⁵**Products** e.g. computer programs, designs, data, products, list of specifications, literature

⁶**Quality** e.g. reliability, validity

⁷**Ideas** e.g. ideas, theories, hypotheses, opinions, research questions

Example	Example	Example	Example	Example	Example
The student is able to list the steps in the following methods of analysis: interpolation and classification.	The student is able to explain the movement of bony segments of the human skeleton system.	The student is able to calculate the shear and bending moment resistance of pre-stressed concrete structures.	The student is able to derive equations describing the steady-state performance of the vehicles discussed during the course.	The student is able to evaluate the quality of the collected data.	The student is able to design systems engineering solutions through the use of requirements analysis and conceptual designs.

Verbs	Verbs	Verbs	Verbs	Verbs	Verbs
Reproduce: Duplicate, List, Repeat, Reproduce Find/identify in e.g. a figure: Identify ^{AN} , Label, Locate, Name, Recognise, Recall	Give explanation: Discuss ^{AN, EV} , Explain ^{EV} Give examples: Give examples, Illustrate ^{AP, CR} In other words: Define, Paraphrase, Rephrase, Restate, Summarise Organise information Categorise ^{AP, AN} , Compar ^{AN} , Contrast ^{AN} , Order ^{AN} , Organise ^{AP, AN}	Apply general: Apply, Administer, Develop ^{CR} , Employ, Perform, Use, Implement, Make use of Apply knowledge: Categorise ^{UN, AN} , Link ^{AN} Apply specific procedures/skills: Assemble, Calculate, Compile ^{CR} , Correlate ^{AN} , Construct ^{CR} , Evaluate, Experiment ^{CR} , Illustrate ^{UN, CR} , Interview, Simulate, Solve ^{AN, EV, CR}	Analyse in general: Analyse, Appraise ^{EV} , Estimate, Examine, Inspect, Investigate, Research, Simplify ^{CR} , Solve ^{AP, EV, CR} Divide: Breakdown, Categorise ^{UN, AP} , Discriminate, Dissect, Divide, Isolate, Prioritise ^{EV} , Order ^{UN} , Organise ^{UN, AP} Arguments (one sided): Criticise ^{EV} , Debate ^{EV} , Discuss ^{UN, EV} , Focus, Highlight, Motivate, Point out, Reason ^{EV} Relationships: Compar ^{UN} , Contrast ^{UN} , Correlate ^{AP} , Infer ^{EV} , Link ^{AP} , Model ^{CR} , Rank, Relate, Reorganise Select applicable procedure/theory/skill: Choose ^{EV} , Identify ^{UN} , Model, Select ^{EV} , Simplify	Taking into consideration: Consider, Deduct, Reason ^{AN} , Value Working towards a conclusion*: Appraise ^{AN} , Assess, Award, Evaluate, Grade, Mark, Rate, Reason ^{AN} , Score, Solve a problem ^{AP, AN, CR} Reaching a conclusion*: Advise, Choose ^{AN} , Conclude, Decide, Determine, Judge, Prioritise ^{AN} , Select ^{AN} Defending a conclusion* (or not): Argue, Convince, Criticise ^{AN} , Debate ^{AN} , Disprove, Dispute, Influence, Justify, Persuade, Prove, Reason ^{AN} , Recommend, Support, Validate Discuss consequences/significance of conclusion*: Discuss ^{AN, UN} , Explain (results, consequences for stakeholders, society, etc.) ^{UN} , Induce, Infer ^{AN} ,	Make something new: Compose, Create, Design, Develop ^{AP} , Discover, Experiment ^{AP} , Invent, Plan Change something: Adapt, Change, Innovate, Modify, Reframe, Revise, Simplify ^{AN} , Substitute, Transform Add something: Add to, Elaborate, Extend Improve something: Improve, Maximise, Minimise Combine some things: Combine, Compile ^{AP} , Integrate New ideas: Formulate, Hypothesise, Originate, Propose, Speculate, Suggest, Theorise Construct: Construct ^{AP} , Illustrate ^{UN, AP} , Draw, Visualise Other: Model ^{AN} , Solve ^{AP, AN, EV} , Program

^{UN, AP, AN, EV, CR} Some verbs can be used in multiple levels of the taxonomy. This is indicated with the superscripts: UNderstand, APply, ANalyse, EValuate or CReate. The verbs used in this document are a selection of the possibilities. You can also use other verbs.

Products	Products	Products	Products	Products	Products	
Definition Fact Label	List Reproduction Quotes	Categorisation Collection Closed questions (e.g. true/false, multiple choice) Examples Explanation Outline Summary Devise a wiki entry	Demonstration (e.g. video) Illustration Interview Performance Presentation Role play Simulation Use formulas, programs, rules, procedure, techniques Calculation	Abstract Analysis of a case/situation Case presentation Chart Checklist Discussion of the (quality of) results' Graph Observation of professional practice Peer feedback Report Spreadsheet Survey	Advise Case presentation Comment Conclusion Discussion/debate Essay Evaluation Judgement Opinion Recommendation Report Review Verdict	Computer program Design plan/blueprint/scheme/drawings Exam questions Game Paper Plan Portfolio Project Prototype Research proposal