

Maths in Practice/Modelling with Maths marking guide

Name:

Task:

Outcome: Clarifying a problem		
S	Does the student show evidence of at least a basic understanding of the problem?	
H	Does the student also identify most of the information needed to find a solution?	
V	Does the student also fully understand the problem, identify all the information needed and make any assumptions that may be necessary?	
Outcome: Choosing a model		
S	Does the student choose a model that, applied correctly, would produce a reasonable (although not necessarily fully correct) solution ?	
H	Does the student choose an appropriate model for the problem?	
V	Is the model chosen also efficient ? Does the student also justify their choice?	
Outcome: Using a modelⁱ		
S	Does the student show that they are able to use their chosen model at least a little?	
H	Does the student show that they are able to use their chosen model correctly (but makes careless errors)?	
V	Does the student use their chosen model efficiently and accurately?	
Outcome: Interprets and checks the solution		
S	Does the student translate the solution into the language of the original problem?	
H	Is there also evidence of checking the reasonableness of the solution (typically using estimation)?	
V	Is there also evidence of evaluating the process?	
Outcome: Communicates an obtained result		
S	Does the student identify the audience and present the solution in a format appropriate for the audience?	
H	Does the student also use clear presentation or consistently use appropriate mathematical language throughout?	
V	Does the student also clearly communicate the solution, use consistently clear presentation and appropriate mathematical language throughout?	

ⁱ The Using outcome will seldom be at a higher level than the Choosing outcome, since the ability to demonstrate the ability to use a model depends on the selection of an appropriate model to use. Where a higher level is given for the Using outcome, it will normally be only one level higher.