



## Notice to Centres

### Guidance for centres on the decoding of symbols and unit abbreviations in Mathematics and Science examinations

Produced on behalf of AQA, CCEA, OCR, Pearson and WJEC

The JCQ and the awarding bodies wish to clarify the use of a reader in Mathematics and Science examinations.

From 2019/20 readers can now decode symbols and unit abbreviations in Mathematics and Science. We would expect this to be for a candidate who is unable to independently access any of the text and symbols in questions, such as a candidate with a significant visual impairment who cannot read Braille, cannot access tactile diagrams or, due to the severity of their impairment, cannot access the standard modified enlarged papers. It would not be expected that a reader would decode symbols and unit abbreviations for the majority of candidates with learning difficulties or other disabilities (who would be able to read the individual symbols/numbers). In this instance the reader would point to the symbol.

The term 'decoding' means the naming of the symbol. It does not involve explaining when or how the symbol is to be used or describing the symbol.

#### Examples of decoding:

356	the reader says 'three hundred and fifty six'
CO <sub>2</sub>	the reader reads each letter/number
2 <sup>2</sup>	the reader says 'two squared'
≤	the reader says 'less than or equal to'
∈	the reader says 'is an element of'
∞	the reader says 'infinity'
$\sqrt[3]{\quad}$	the reader says 'cube root'
θ	the reader says 'Theta'
∫	the reader says 'Integral'

Centres **must** ensure that readers are appropriately trained and are able to decode symbols and unit abbreviations accurately.