

Paper Reference(s) 4SS0/1P
Pearson Edexcel International GCSE (9–1)

Science (Single Award)
Physics
PAPER: 1P

Friday 14 June 2024 – Afternoon
Time: 1 hour 10 minutes

Diagram Booklet

THIS DIAGRAM BOOKLET MUST BE RETURNED WITH THE QUESTION PAPER AT THE END OF THE EXAMINATION.

In the boxes below, write your name, centre number and candidate number.

Surname					
Other names					
Centre Number					
Candidate Number					

INSTRUCTIONS

There may be spare copies of some diagrams in case you need them.

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Spare Copies

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Question 1

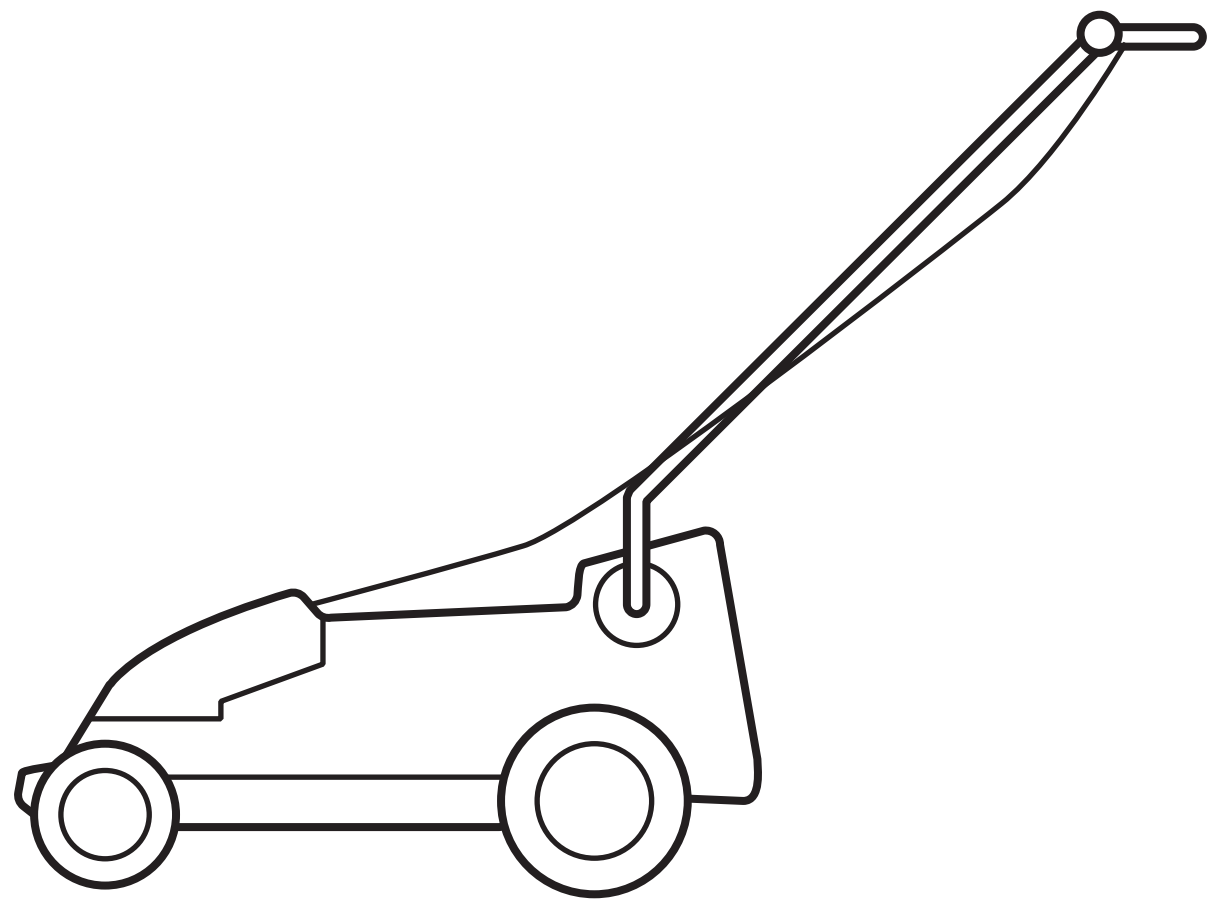
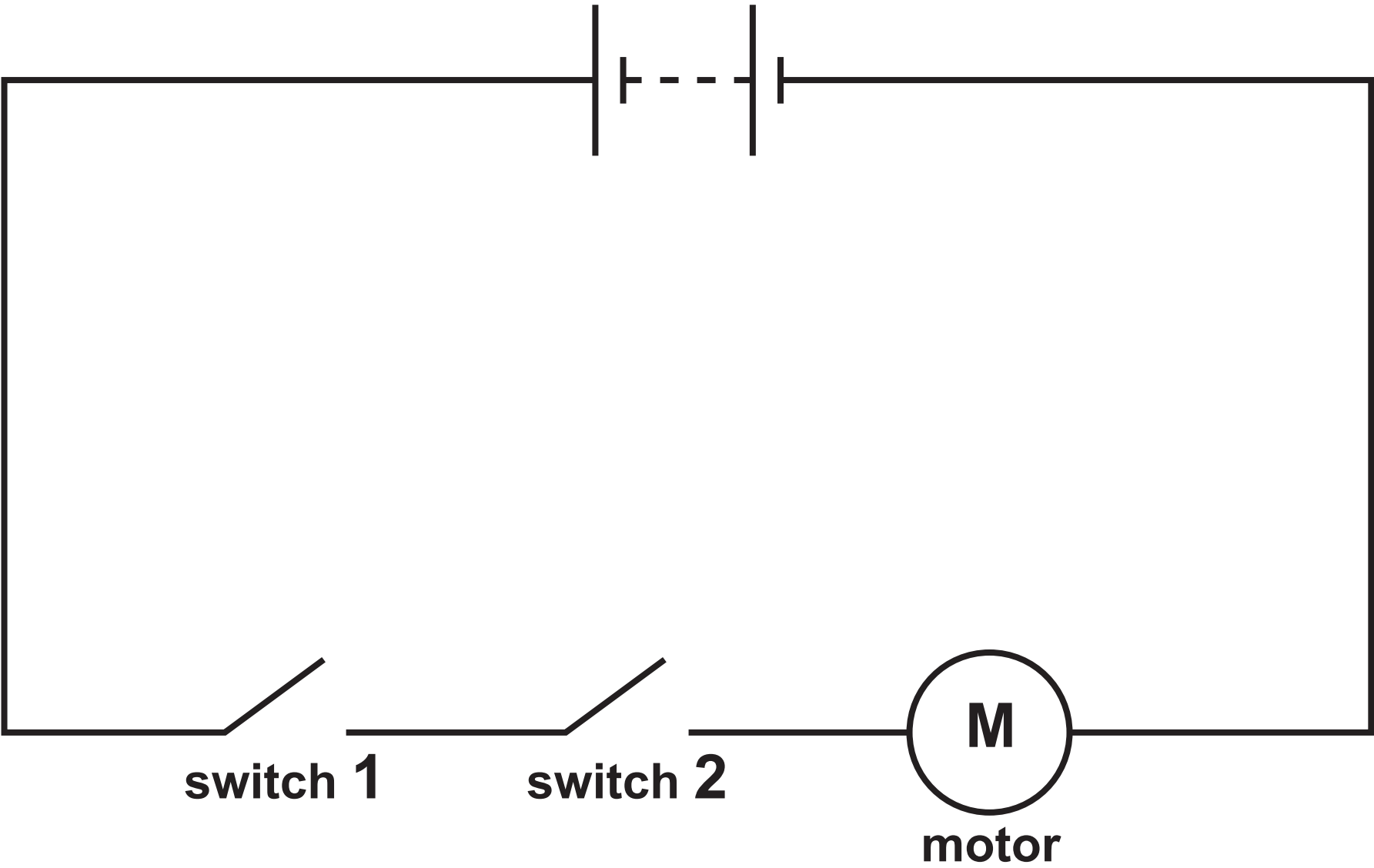
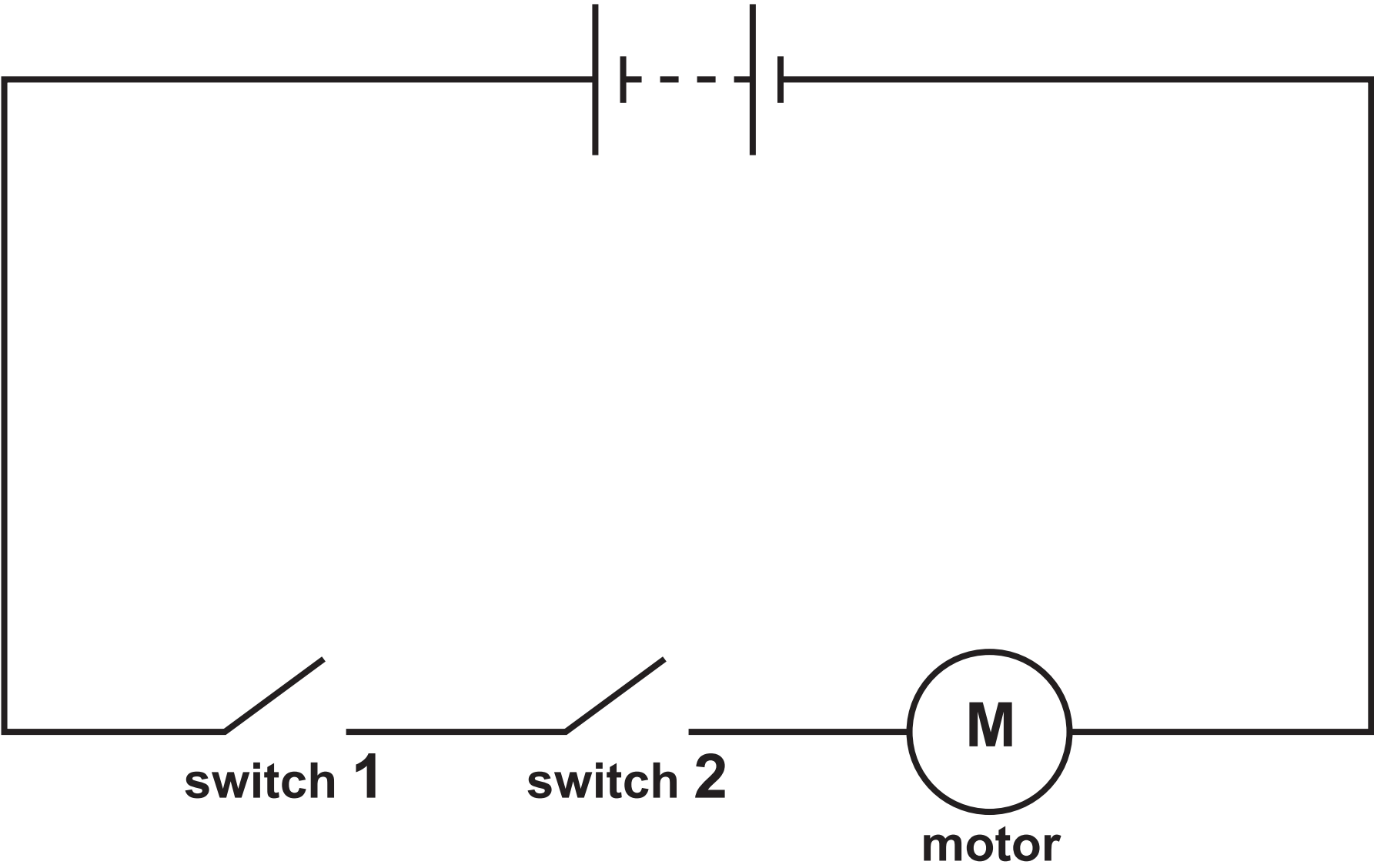


DIAGRAM 1



Question 1(c)

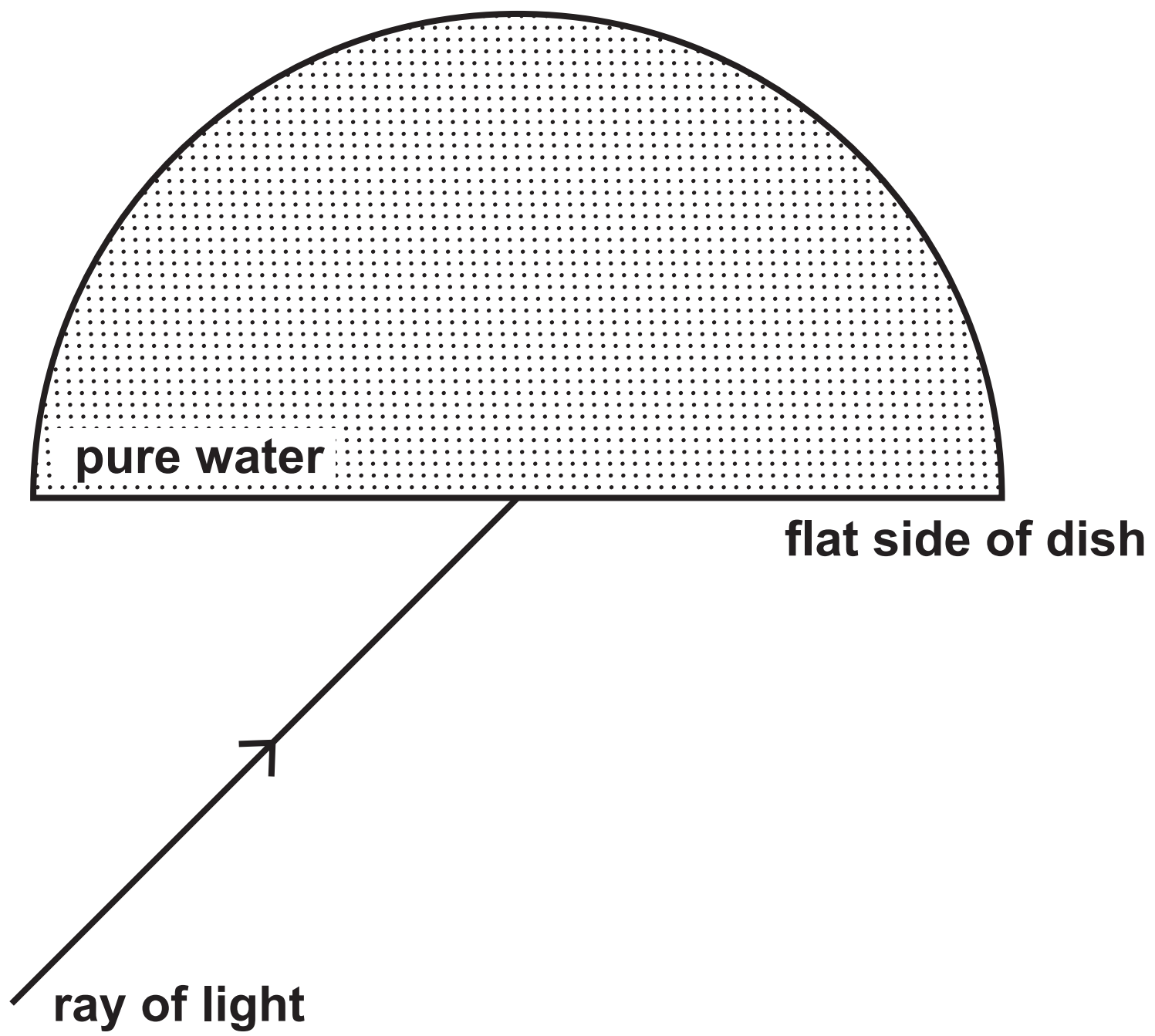
DIAGRAM 2



Question 2(a) – Blank page

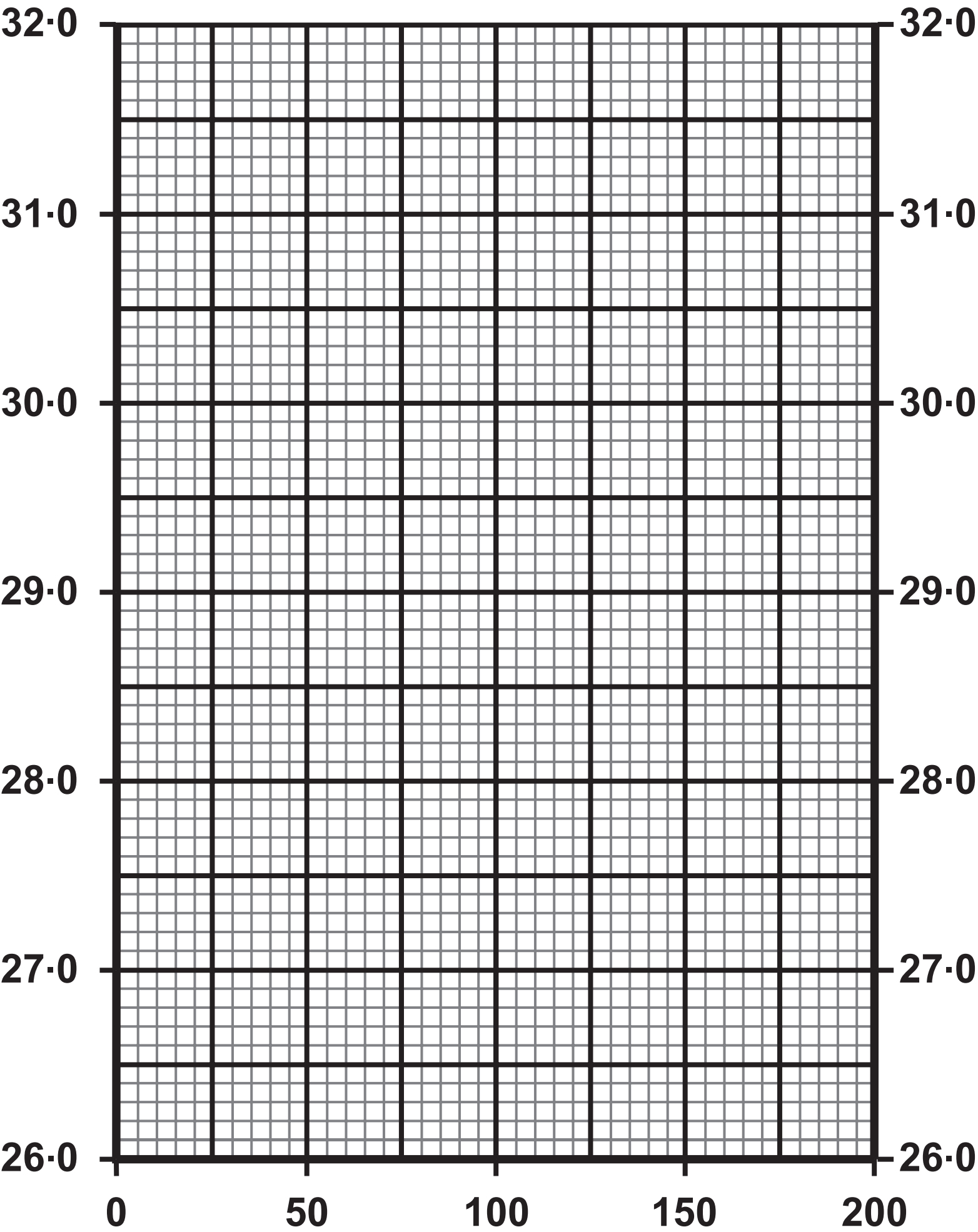
Question 3(a)

Variable	Independent	Dependent	Control
volume of water			
angle of incidence			
angle of refraction			
mass of sugar			
colour of light			

Question 3(b)

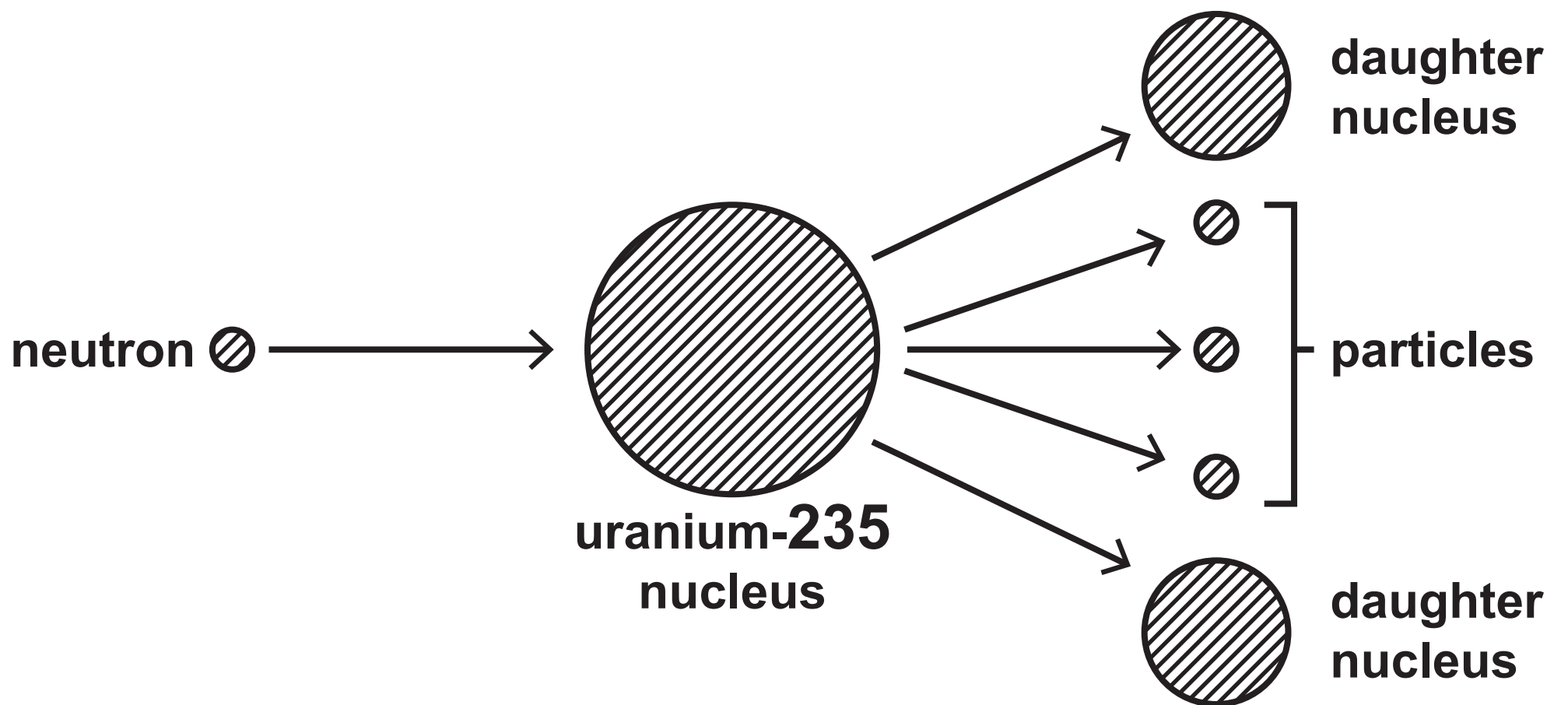
Question 3(c)

Angle of refraction in $^{\circ}$



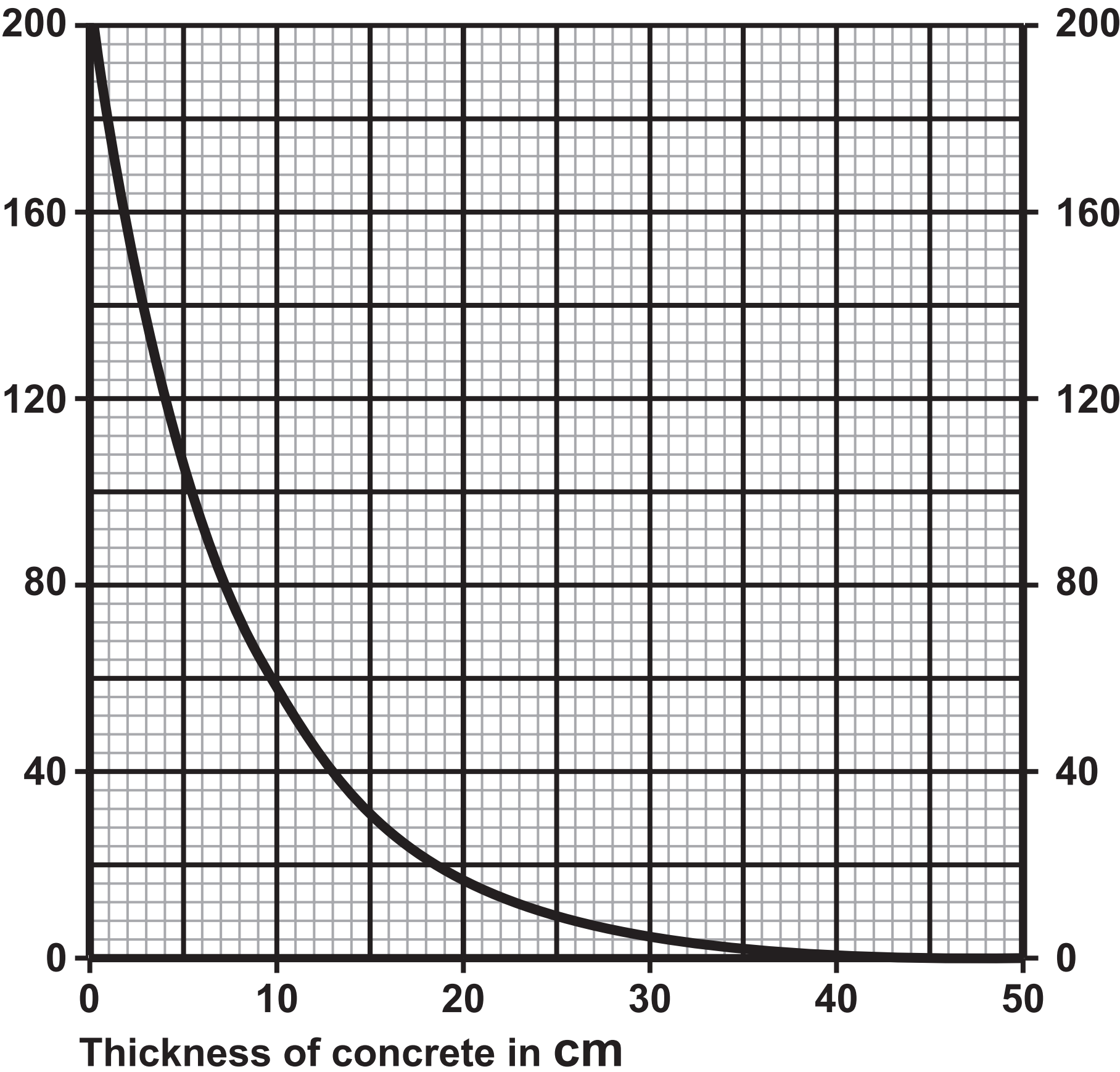
Mass of sugar in g

Question 4(a)

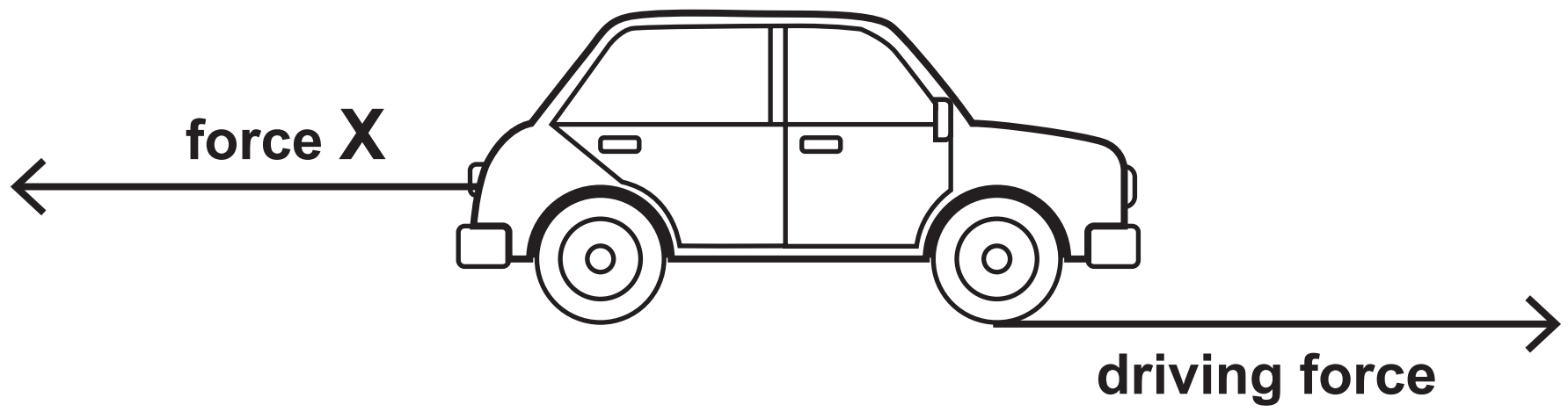


Question 4(b)(ii)

Energy of gamma radiation
in arbitrary units

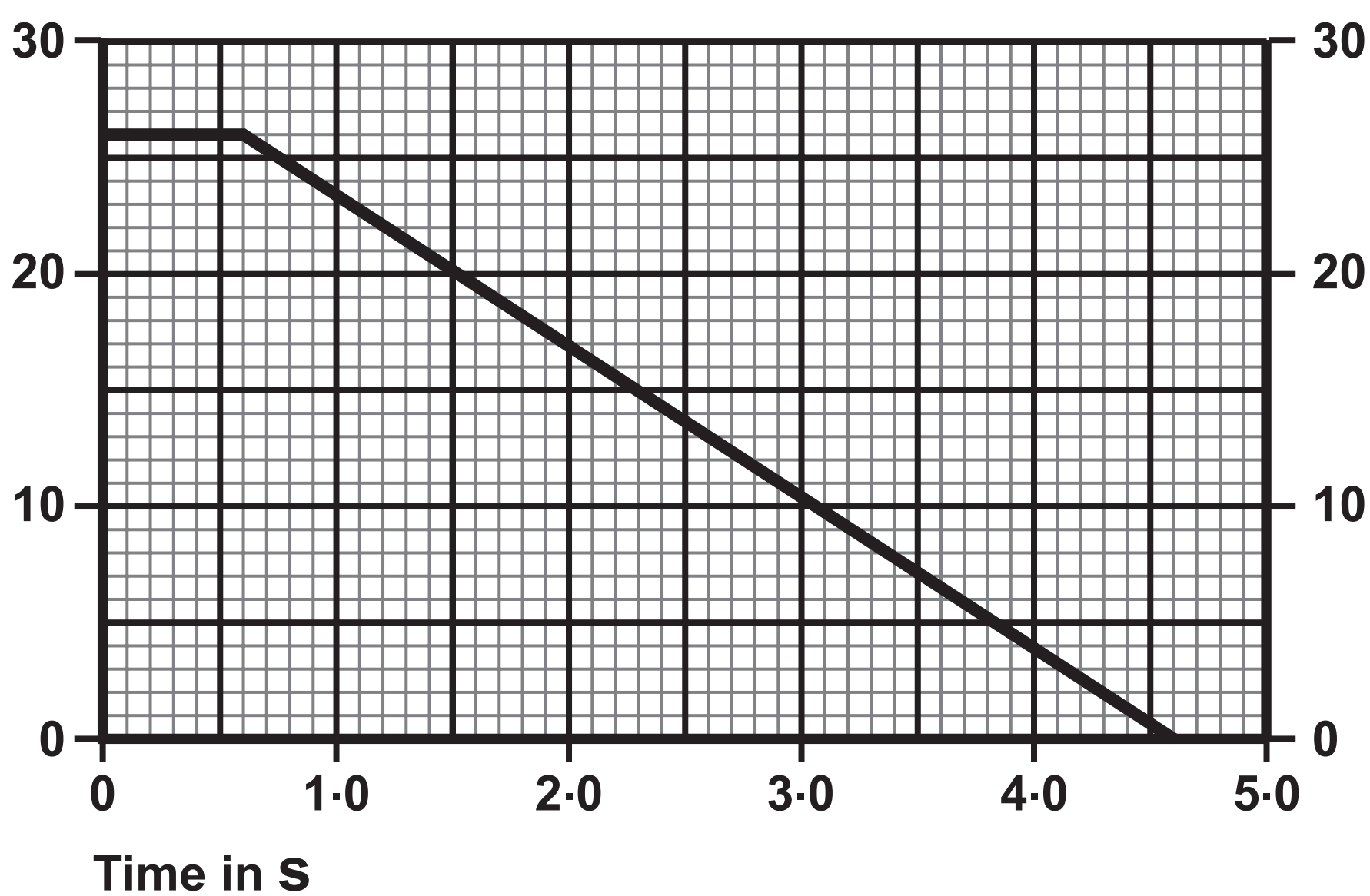


Question 5(a)

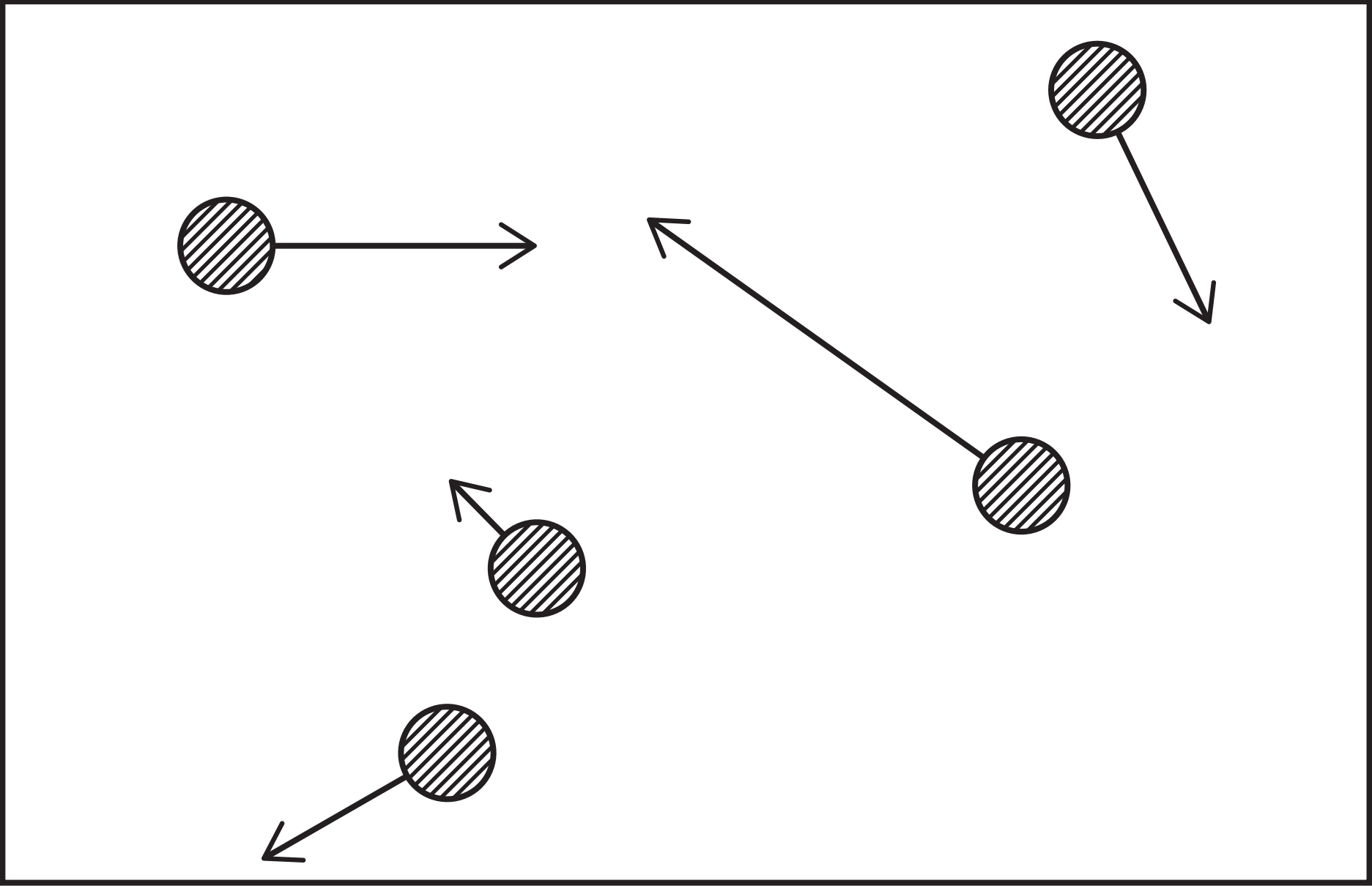


Question 5(b)

Velocity in m/s



Question 6(a)

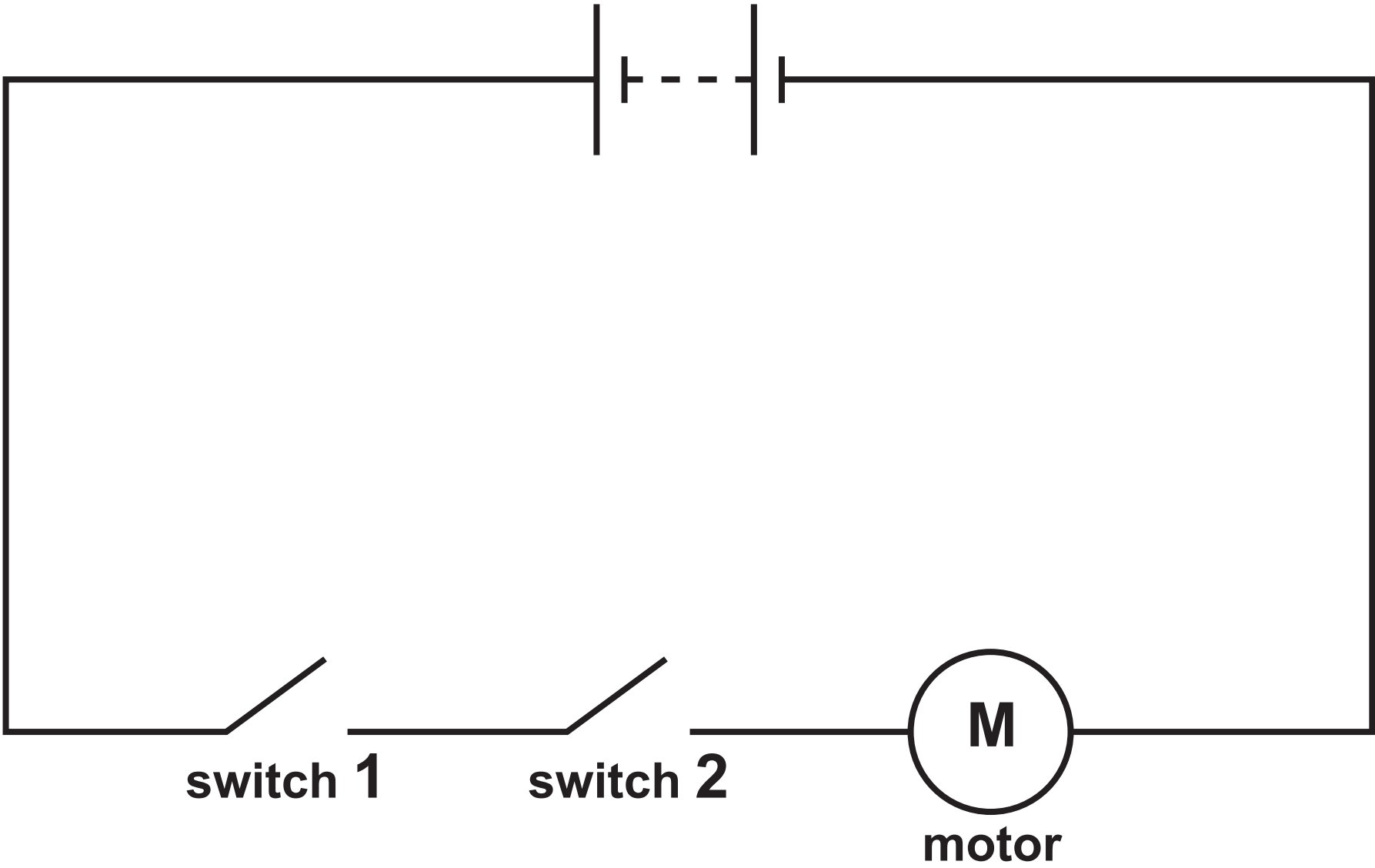


Question 6(b)

Mass of one gas particle	$7.3 \times 10^{-26} \text{ kg}$
Mean kinetic energy of one gas particle	$9.8 \times 10^{-21} \text{ J}$
Total mean kinetic energy of gas particles	$1.2 \times 10^4 \text{ J}$

Question 1(c)

DIAGRAM 2

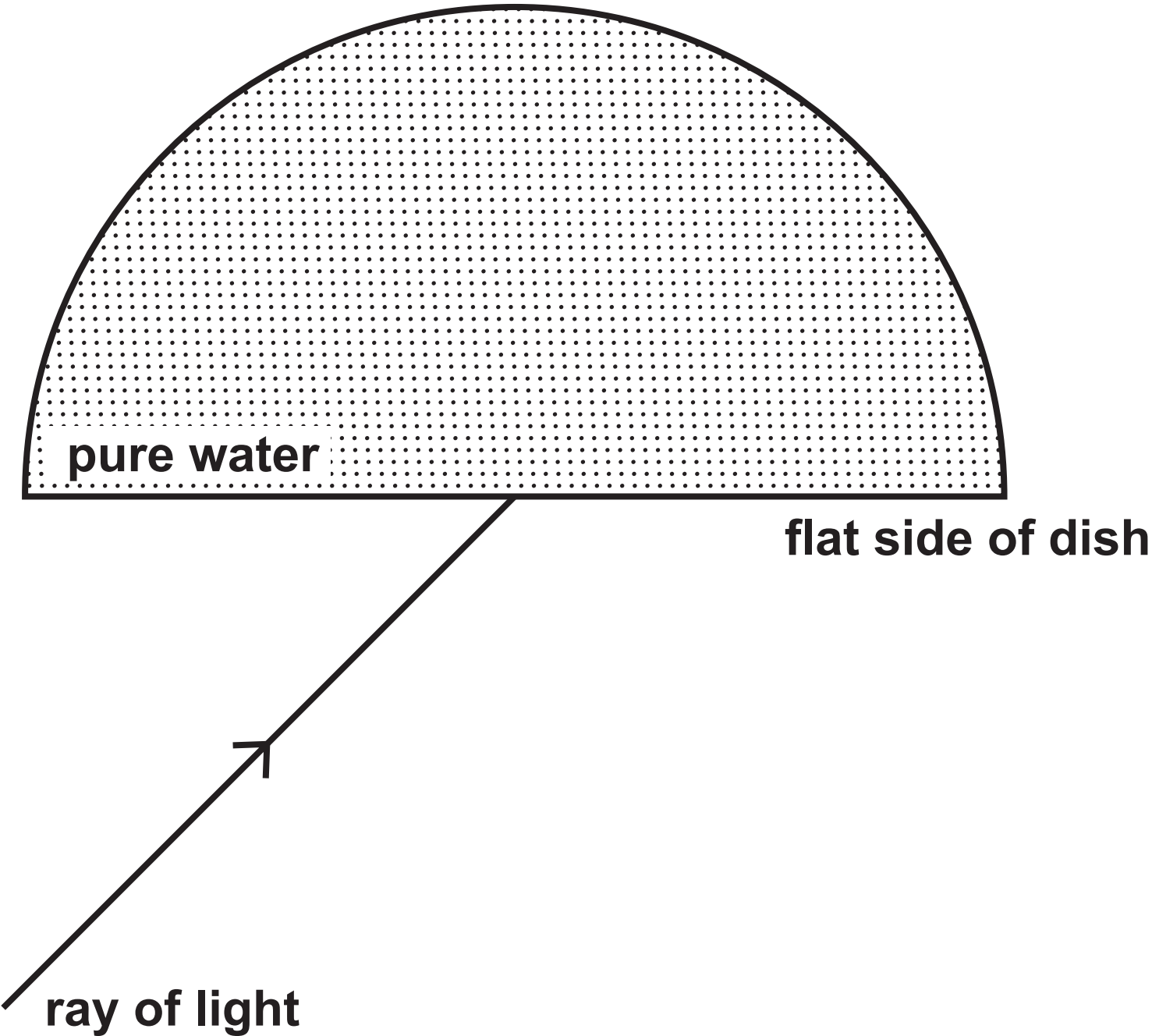


Question 2(a) – Blank page

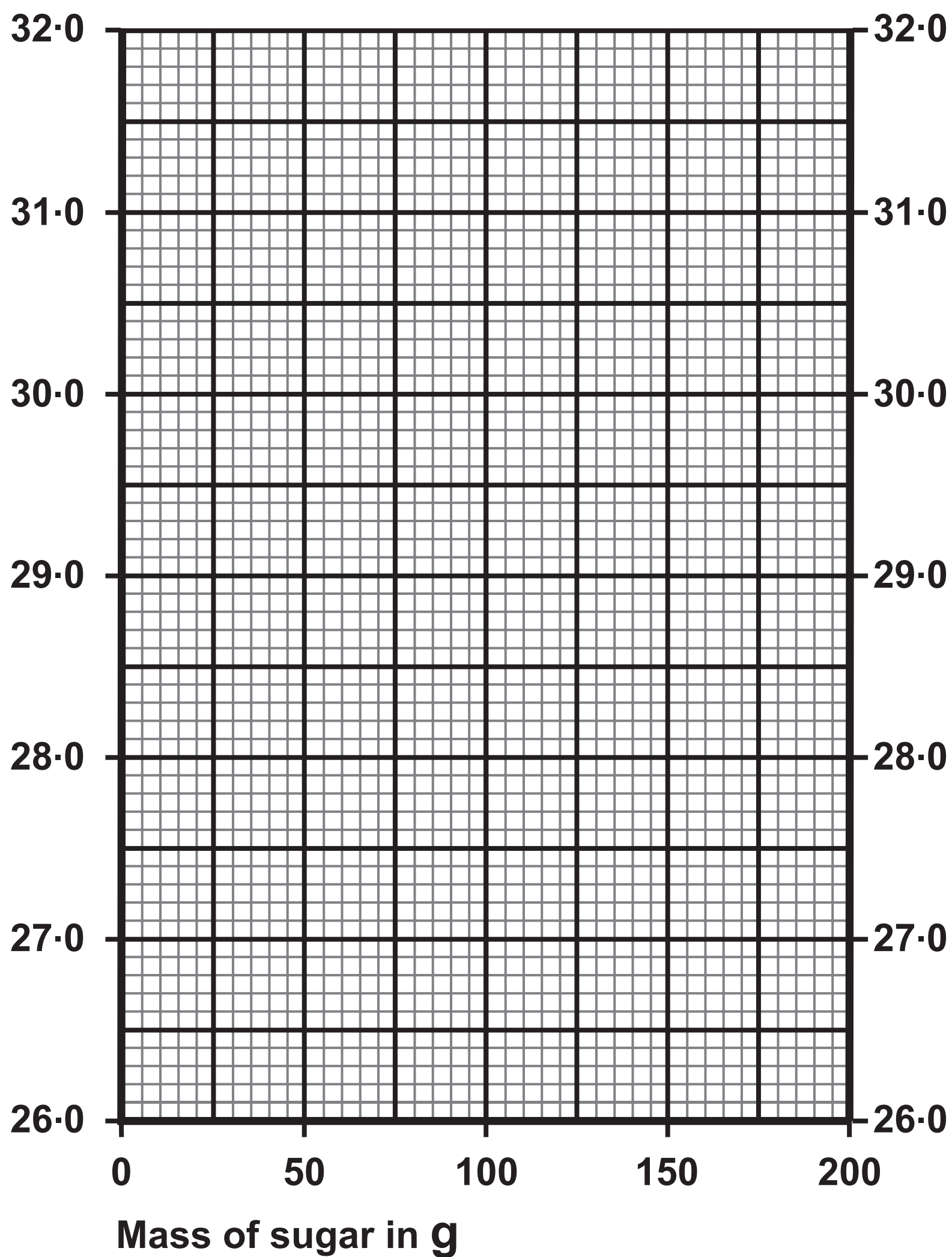
Question 3(a)

Variable	Independent	Dependent	Control
volume of water			
angle of incidence			
angle of refraction			
mass of sugar			
colour of light			

Question 3(b)



Question 3(c)

Angle of refraction in $^{\circ}$ 

Question 1

(Source adapted from: <https://www.shutterstock.com/image-photo/norwich-norfolk-uk-september-4-2021-2036487353>)