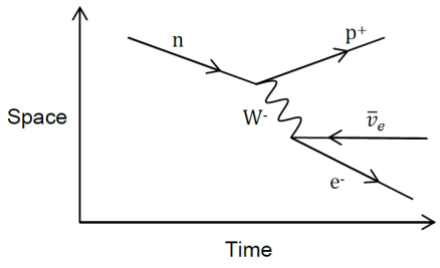
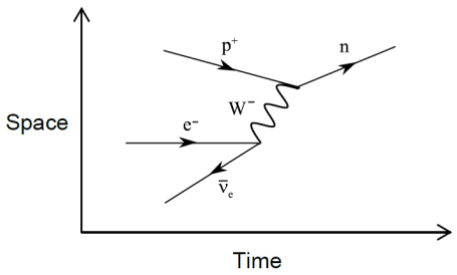
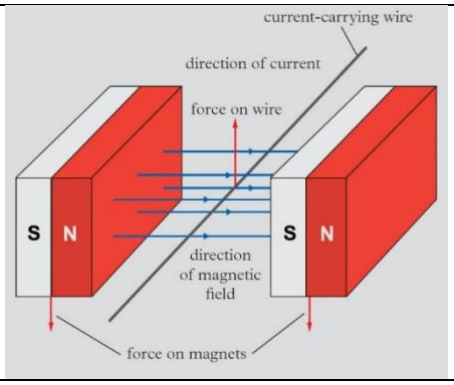
OUP New Century Physics for Queensland - U3&4 *Student Workbook* (O'Callaghan, Fitzgerald & Walding) 2019

Errata for Exam Excellence Questions – from Dr Richard Walding 13 October 2022

U3&4 SWB	Correction
Ch 1 Q8	Add (b) **Determine** how far horizontally from a point directly below where the raft was dropped, the raft will hit the water (assuming no air resistance)?
Ch 1 Q8b	Answer (b) 571 m
Ch 2 Q10 (a)	Answer 0.083 m s^{-2}
Ch 3 Q9 (b)	Answer 7.35 x 10^2 N
Ch 3 Q9 (c)	Add (c) **Calculate** the angle of F_S with the horizontal.
Ch 4 Q7	Answer 4.27 x 10^{39} N
Ch 6 Q3	Question page 52 should read "Two suspended spheres are 20.0 cm apart."
Ch 6 Q8	Answer $\overrightarrow{F_Z}$ = 9.74 N up the page
Ch 6 Q9(b)	Answer $a = 3.6 \times 10^{12}\ m s^{-2}$
Ch 7 Q3	No option is correct. The answer is 677
Ch 8 Q6	Answer 12 Wb
Ch 10 Q6 (a)	Answer 83.55 m
Ch 10 Q7	Change question on page 92 from "**Compare** this speed, observed from Earth, to that observed by an astronaut onboard the spacecraft." To "Determine the distance the space-traveller would measure as the distance from the Earth to the star."
Ch 10 Q7	Answer 14.05 ly
Ch 10 Q9	Second last line in solution should read (3 x 10^8)^2. Answer is correct.
Ch 11 Q2	Question on page 87 should have Option B as 4.44 x 10^{-19} J
Ch 11 Q8	Change data in question on p 98 to read ".. by a $0.157 \mu m$ UV light."
Ch 12 Q1	For the question on p 101, change the exponents for all four options to 10^{-19}
Ch 12 Q7	Delete 'quantum orbitals' from Figure 3 page 102
Ch 12 Q9	Change the exponents for all values in the Table 1 on page 101 to 10^{-19}
Ch 13 Q2	Both (A) and (D) are correct
Ch 14 Q7	This is the answer for Q 8
Ch 14 Q8	This is the answer for Q 9
Ch 14 Q9	This is the answer for Q 7
Ch 14 Q10	(a)  (b) 
Prac 7.4 page 141	

Worked solutions can be found at: seniorphysics.com/ncpq/swb

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