Achieve in Science

Combined Science Trilogy

Calculating Magnetic Flux Density

LEVEL 1	Calculate the force on a conductor of length 0.5m, carrying a current of 3A in a field of flux density 0.05T.	0.075N
	Calculate the force on a conductor of length 0.4m, carrying a current of 4A in a field of flux density 0.093T.	0.1488N
LEVEL 2	Calculate the magnetic flux density when a force of 0.1N acts on a conductor of length 0.25m, carrying a current of 5A.	0.08T
	Calculate the magnetic flux density when a force of 0.1N acts on a conductor of length 0.5m, carrying a current of 1A.	0.1T
LEVEL 3	Calculate the current flowing through a conductor of length 0.3m, which has a force of 0.025N acting on it in a field of flux density of 0.04T.	2.08A
	Calculate the current flowing through a conductor of length 0.5m, which has a force of 0.06N acting on it in a field of flux density of 0.05T.	2.4A
LEVEL 4	Calculate the length of a conductor carrying a current of 2.5A in a field of flux density 0.05T with a force of 0.075N acting on it.	0.6m
	Calculate the length of a conductor carrying a current of 5A in a field of flux density 0.05T with a force of 0.075N acting on it.	0.3m

$$F = BIl$$