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CU S100/04
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Title : Science course unit 4.

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F.R. Stannard.
A.J. Walton.

Producer: Nat Taylor.

1ST TX: 31-1-71

Seq.	Time	Footage	Sequence List	Sound Cue
1.	6'03"		Introduction to electromagnetism. Professor Pentz demonstrates the presence of electromagnetic force using electrified brass rods. Attraction/deflection when a current passes through both is demonstrated.	
	10'21"		A.J. Walton demonstrates electric flow through wires. He shows that there is an actual flow by using a paddle device which is rotated by a flow of electrons passing over the paddles.	
2.	13'27"		Can the flow be collected? Dr. Walton demonstrates that it can when he passes an electric current through metal spheres. Spheres are brought together through electromagnetic attraction and remain together when the current is switched off. The electrostatic force remains in the spheres.	
	17'40"		An oscilloscope is used to measure the amount of charge transferred.	
			Introduction to fields of force.	
	18'25"		Dr. Stannard uses models to demonstrate fields of force. He rolls ball bearings down a slope. They are deflected by irregularities in the slope. The force here is gravity.	
3.	21'20"		Diagram of an electron gun from a cathoderay tube is shown to demonstrate how this deflection by a field of force can be used to focus electrons.	
	22'15"		Dr. Stannard uses a two dimensional model to demonstrate the same point.	
	24'30"		Credits.	