

Title : Science course unit 17.
(Genetic code-title on script)

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CU S100/17

Tape No. 6LT/70155

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Form VTR

574.87

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Seq.	Time	Footage	Sequence List	Sound Cue
1/	48"		Prof. Pentz with a large model of a cell. He explains that this unit will be concerned with the cell nucleus.	
	1'37"		S. Hurry with a potted African Blood Lily. Cells from this plant have been taken for examination. Hurry tells why he chose cells from this plant. - They have large, easy to see <u>chromosomes</u> .	
	2'27"		Film sequence showing process of <u>mitosis</u> . The different stages of mitosis are pointed out and explained by S. Hurry. Film is stopped at each stage and still photograph introduced as Hurry gives his explanation.	574.87623
	3'46"		<u>interphase</u>	
	4'47"		<u>prophase</u>	
	7'12"		<u>metaphase</u>	
	8'02"		<u>telophase and anaphase</u>	
			Hurry reviews the process of mitosis	
	9'47"		Film sequence of mitosis seen again, this time without interruptim. Commentary by S. Hurry.	forms around them.
2	10'50"		Pentz briefly takes up topic of nucleic acid as a short introduction to B.S. Cox's experiment in <u>DNA transformation</u> .	Well, there you----- Cox, B.S.
	15'02"		B.S. Cox performs the <u>DNA transformation experiment</u> . He uses bacteria cultures to show that DNA is a carrier of genetic information. 2 stains of bacteria are used, one of which can make <u>tryptophan</u> and one which cannot. The tryptophan is needed for bacteria culture growth. As a result those bacteria in a non-tryptophan environment, which cannot produce their own tryptophan, do not grow. Highlights of the experiment are shown.	574, 87320724

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PROGRAMME SEQUENCE LIST

Continuation

Seq.	Time	Footage	Sequence List	Sound Cue
2	17'13"		DNA solution from the <i>tryptophan</i> making culture is added to the non-tryptophan making culture. The process of extracting the DNA is explained but only the final part shown. Shots of the DNA being precipitated out with alcohol and the fibrous DNA precipitate being spooled out and placed in a sterile salt solution.	
	20'40"		Once the DNA solution is added to the non-tryptophan making culture, it too grows. Only highlights of the experiment are shown.	
,	22'26"		Cox explains the controls needed to perform the experiment and shows what happened to the controls during the experiment. He then sums up the experiment.	... do that test
3	23'03"		Hurry dsunseup the unit Credits.	We've examined in detail-----