	Ifedure of
	Cene Expersoron - Pyotein Syntheses - Transcription + Translation
	Trunscription + Translation
	Vrotin = Trail & benotype
	trail: a physical cherotteritie
	- a tract is also called a phenotype
	- Weeds can be inherenful such as shen color
	- trait is also called a phenotype - traits can be unhernful such as stin color - traits can be normal or disease such as cystic febroics, huntington's disease
	Deciphoring the yenotic corde from an amino acid sequence
	hy pothetizer
Proteins:	Methionine - Serine - Tropodan - Olycine - Leucine - Valine - Hanine
	AUG VCG VGG GGA UVA GVA GCC
m RNA:	AUG VCG VGG GGA UVA GVA GCC
DNA:	IAC AGC ACC CCT AAT CAT CGG
	We will name this gene + 15 & ie. this gene has a known
	Chromosopul lezation.
	An exter in DNA Replication can cause a mutaled gare
	An exerci in DNA Reglication con course a mutated gene To mutations can course phenotypic differences.
	■n1 · 1 · 1 · 1 · 1 · 1 · 1 · 1 · 1 · 1 ·
	Mutagers: elements foctors that cause cencer 12 Radiation + Coun Cruse the formation of a thymine dimer
	Lo Ch. ' I
	La Chemicala La Crigorette smoke
	inflations agents
	- myeurs agmi
	Neudootide Friesian Repair
	Neudeotide Exission Repair 40 it is possible for a call to repair some mutations

Mitalions
No mutation Silent
DNA TCC TTT
mRNA UGG UUU
Protein Lys Lys
Mutation Activity
"Wild - type" Mutant
AT+66C AATGGC J-alleles
brown fur while fur
town fue was fue
Therotypes - normal all division E! Cancer
normal alluristics Center
normal cell cycle
Mis course Car again
un controllable & irregular cell cycle
cell division
Con apposition
■ Concer
- a mass of collo that was dividing out of contral
and the state of the sunday our of convent
and have the coulty to spread
and have the chility to spread - a group of diseases horactorized by this - beginne tumos: built up of continuous cell division without the whilety to more from the original rite - malignant tumos: a "concerous" tumos with the chility
- legical rumoc. Still up of Continuous cell division
- I de l'a more from more from the dist
maly new tumor: a concertors with the obility
to speed.
- Cancerous cells have no certact inhibition - un Controled growth - no apotoses (cell "suicide") when deeds are found
- La Carlo a the
- ti (10 " la ")
ne apoloses (cell suierde) when offens we found

■Cell Check Points
- checks if replication is going as expected
- if problems are Count gives a chance to fix then
- else cell will self-destruct - Prote - energine: normal concer inhibiting gene - Oncoyene: mutabled gene that no longer functions properly - Growth factor gones: tells allo to divide - Tumor suppressorgene: prevents division - DNA repair genes: repair replication errors (error not fixed) Znd leading course of death

- 1 in 3 develope conver

- 1 in 4 will die from concer