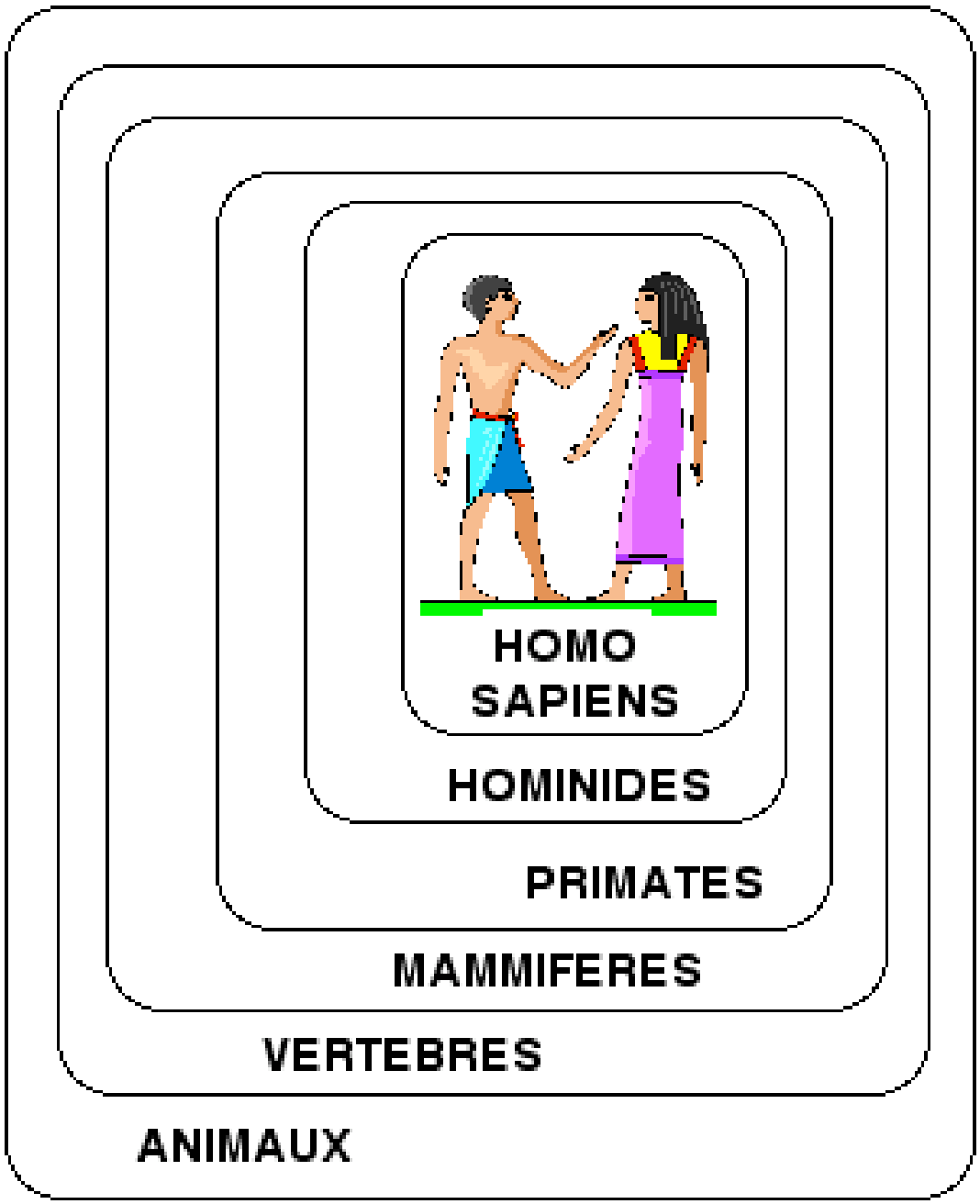
MANUEL SVT 3

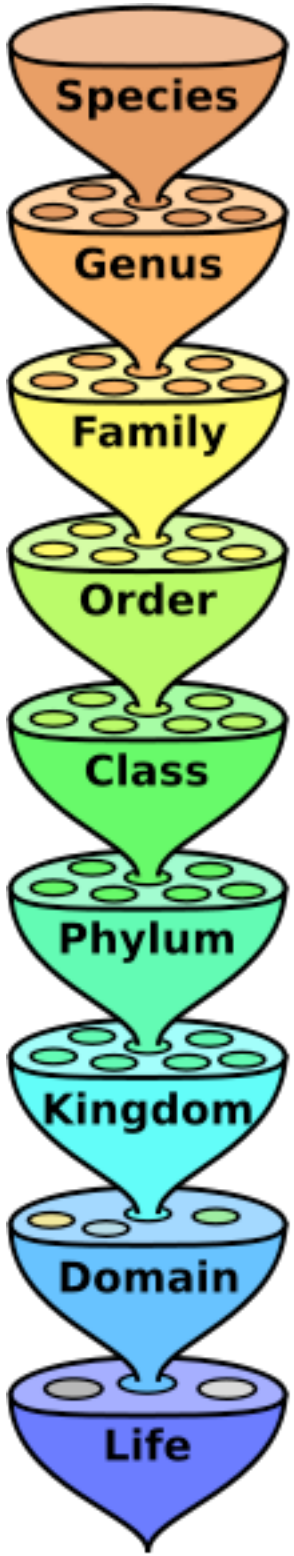
Libre & gratuit

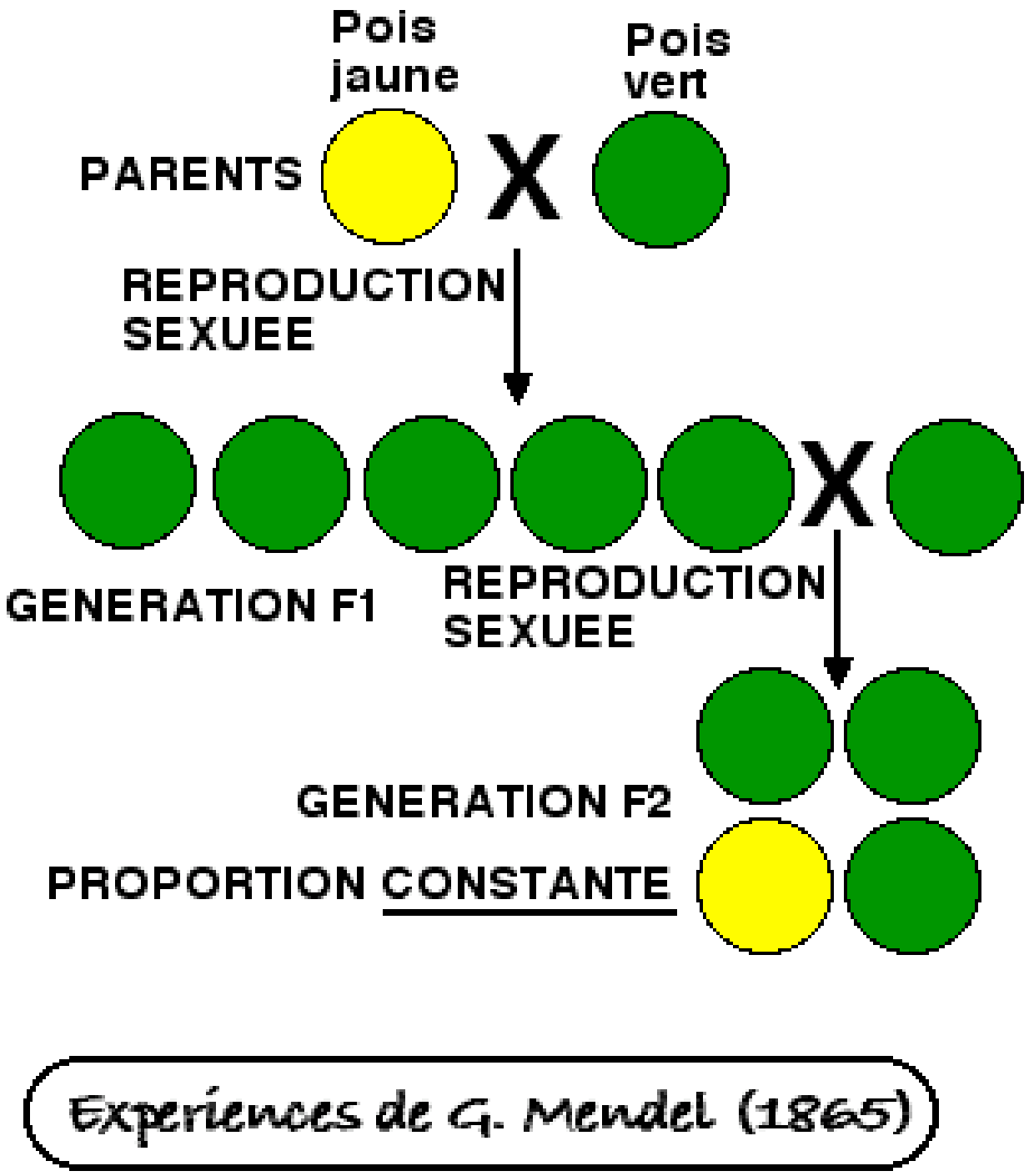
Pr. R. Raynal - Dr de l'université de Toulouse

Documents pour le professeur
(et pour les exposés des élèves....)

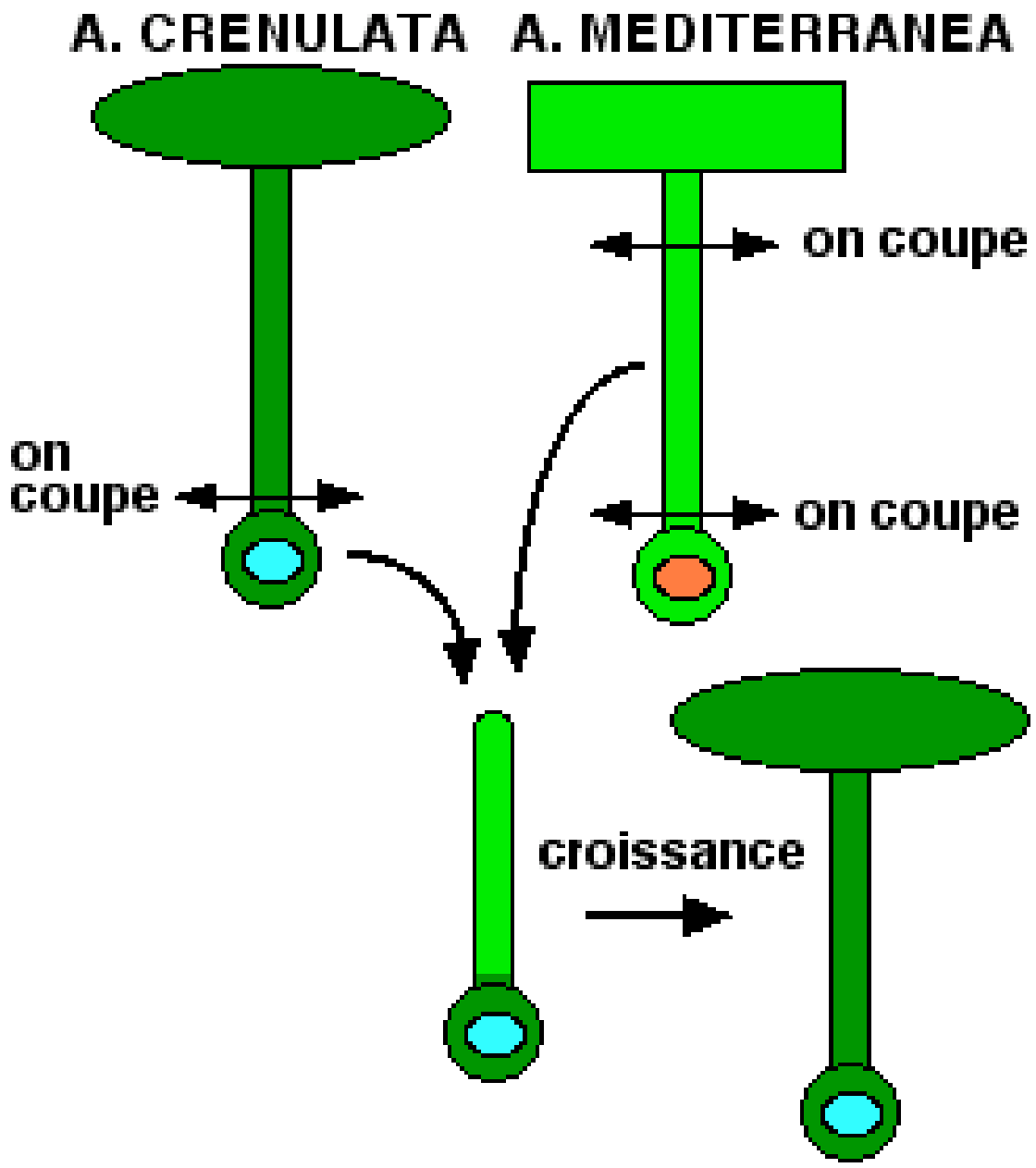
Chapitre 1/3: Génétique


HOMO
SAPIENS
HOMINIDES
PRIMATES
MAMMIFERES
VERTEBRES
ANIMAUX


Species
Genus
Family
Order
Class
Phylum
Kingdom
Domain
Life



Expériences de G. Mendel (1865)



Expérience de Hammerling (1930)

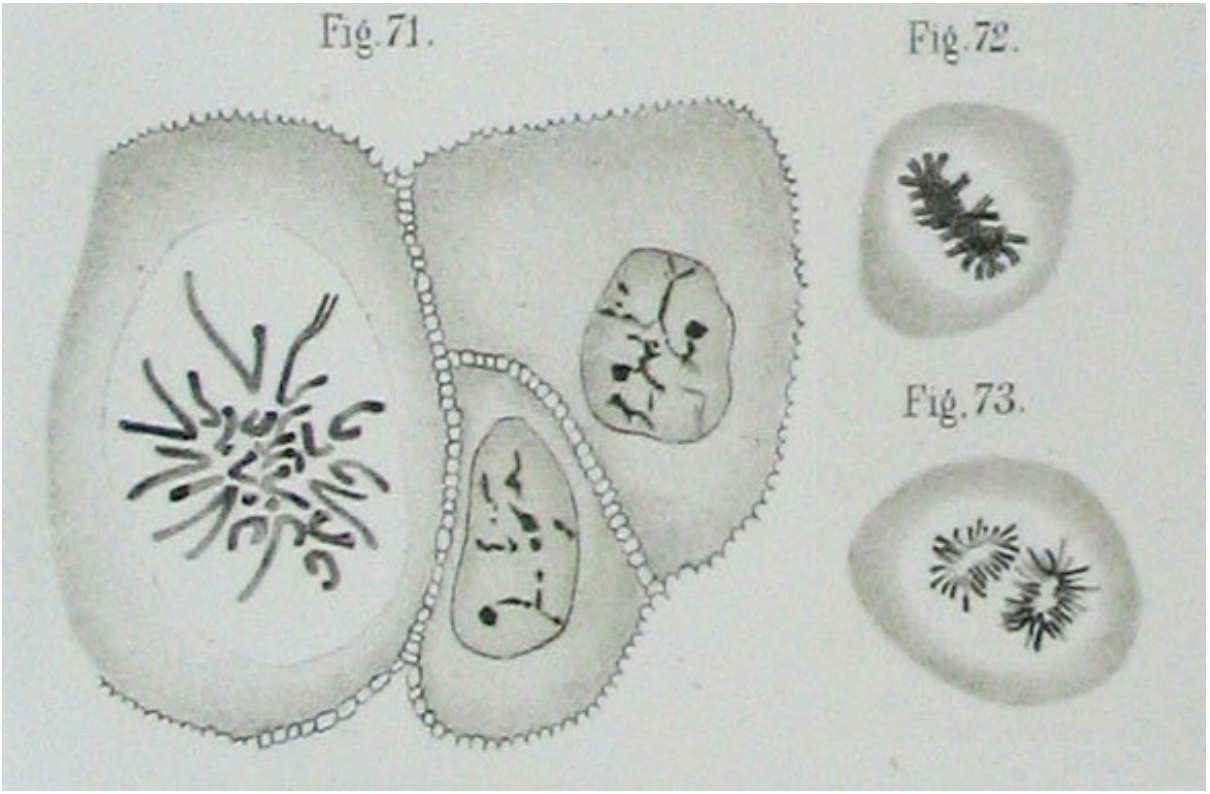
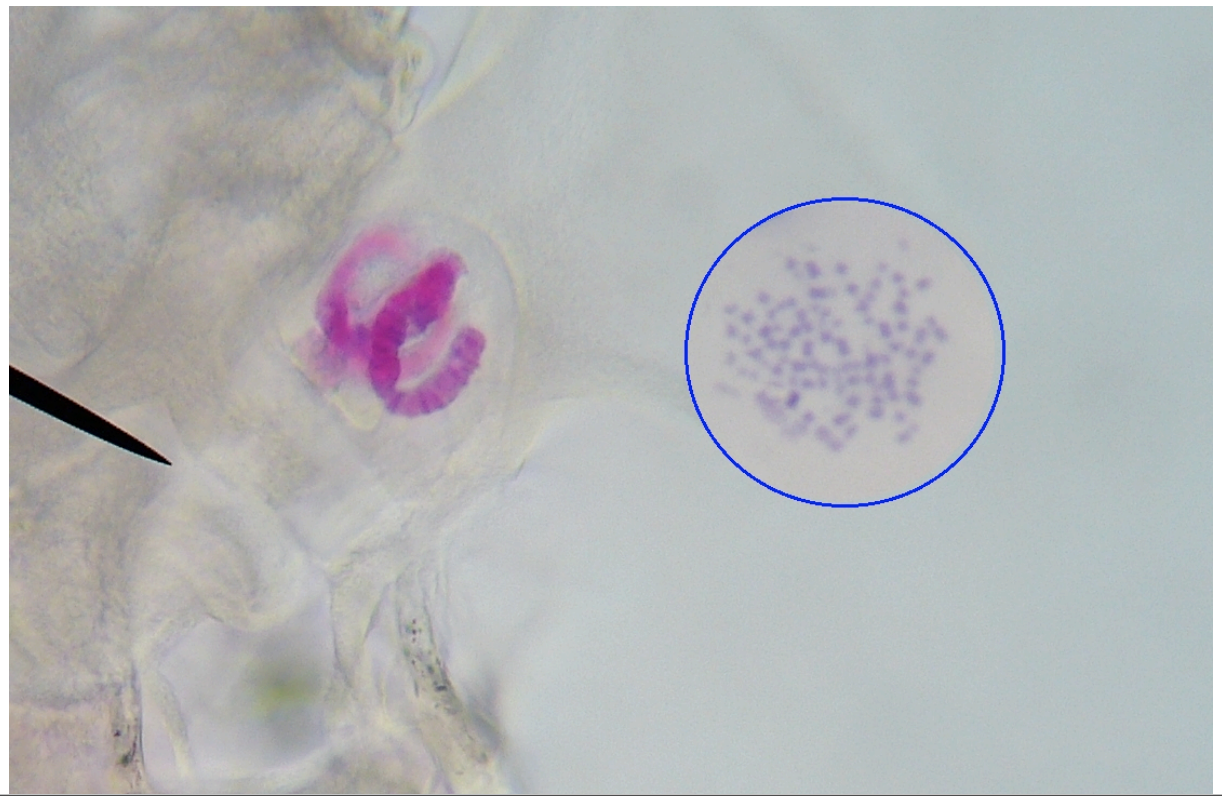
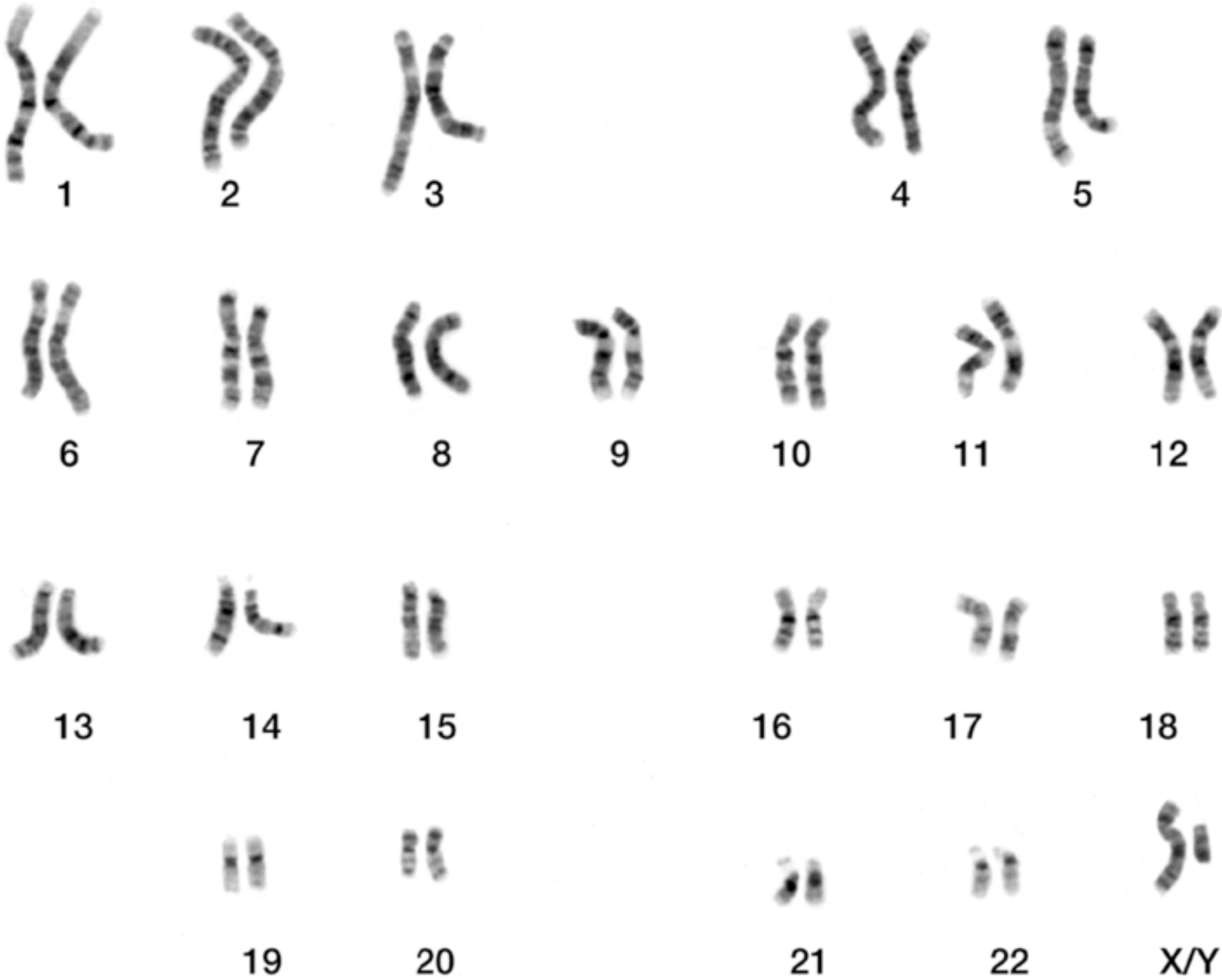


Fig. 71.
Fig. 72.
Fig. 73.

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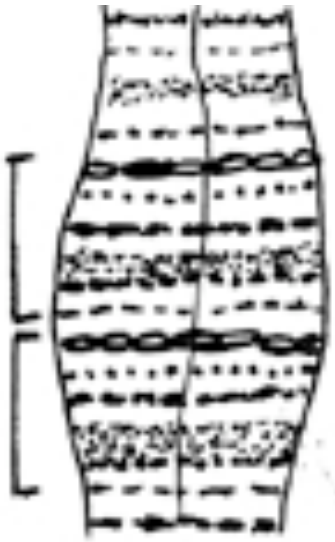
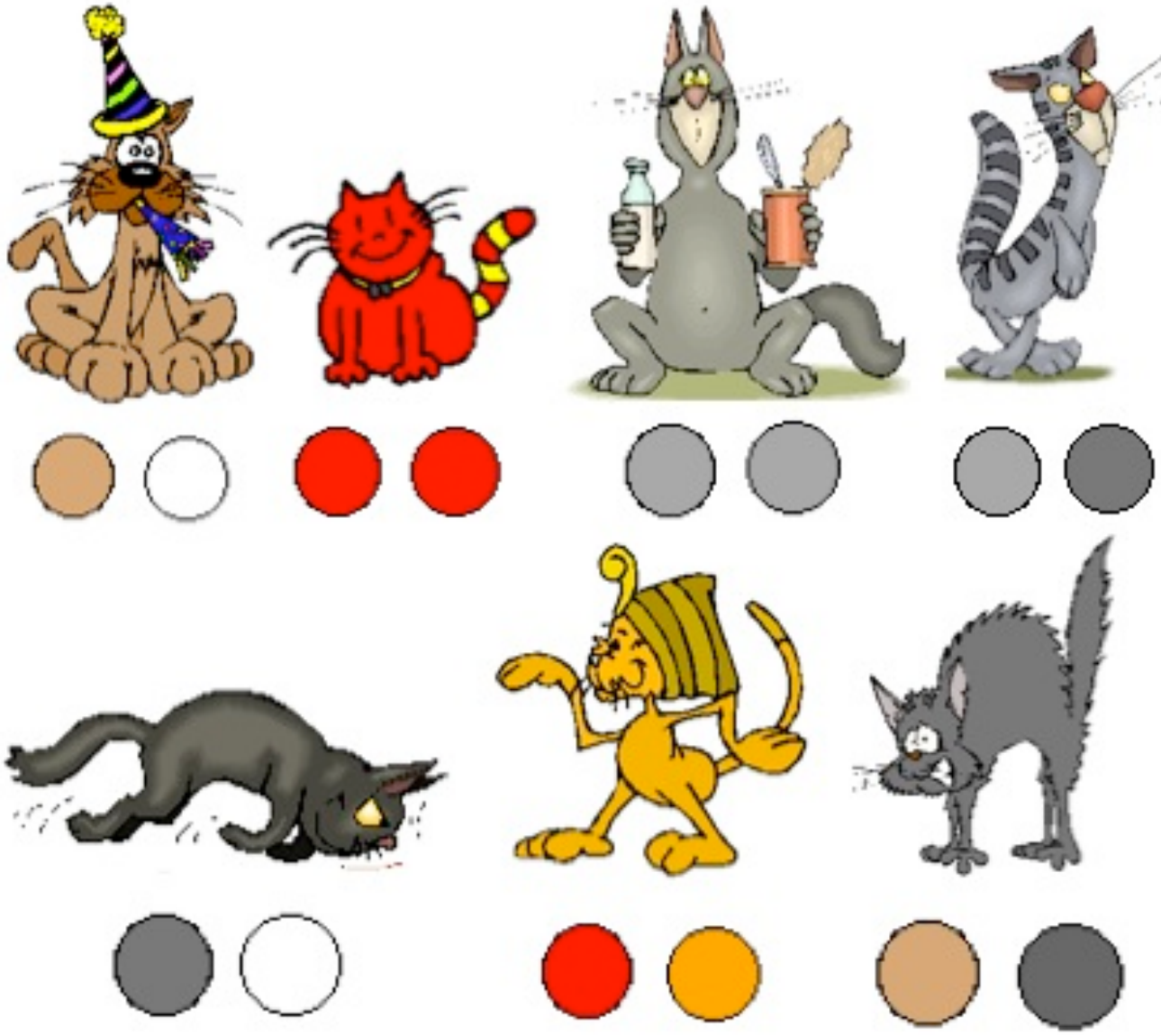
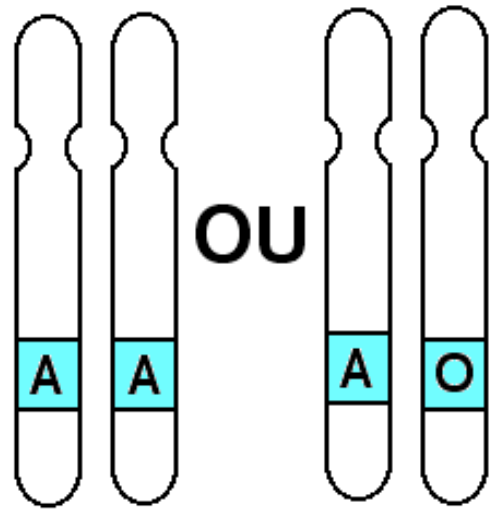
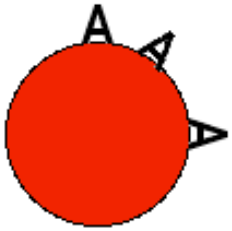
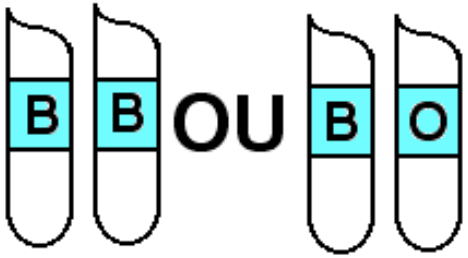
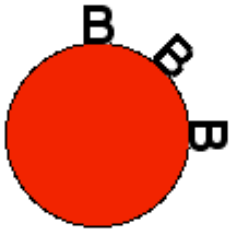
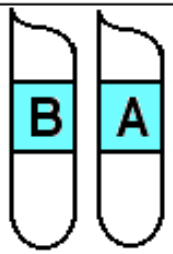
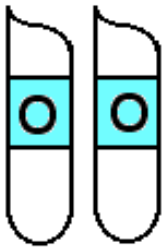
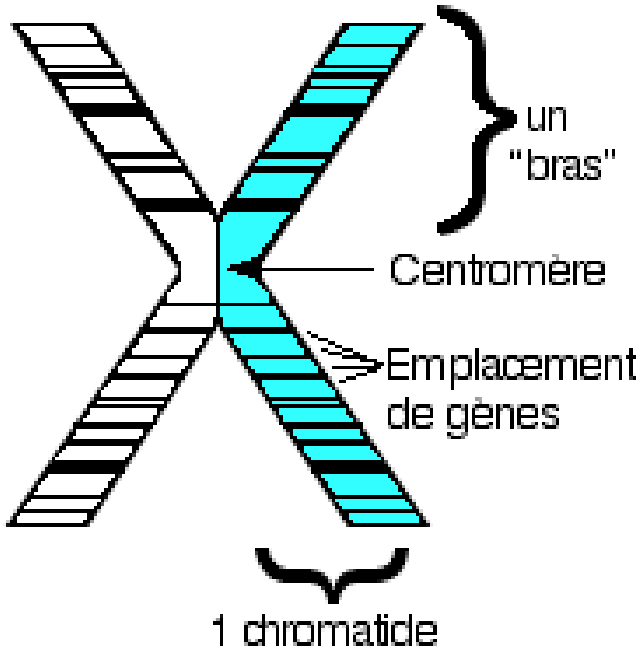
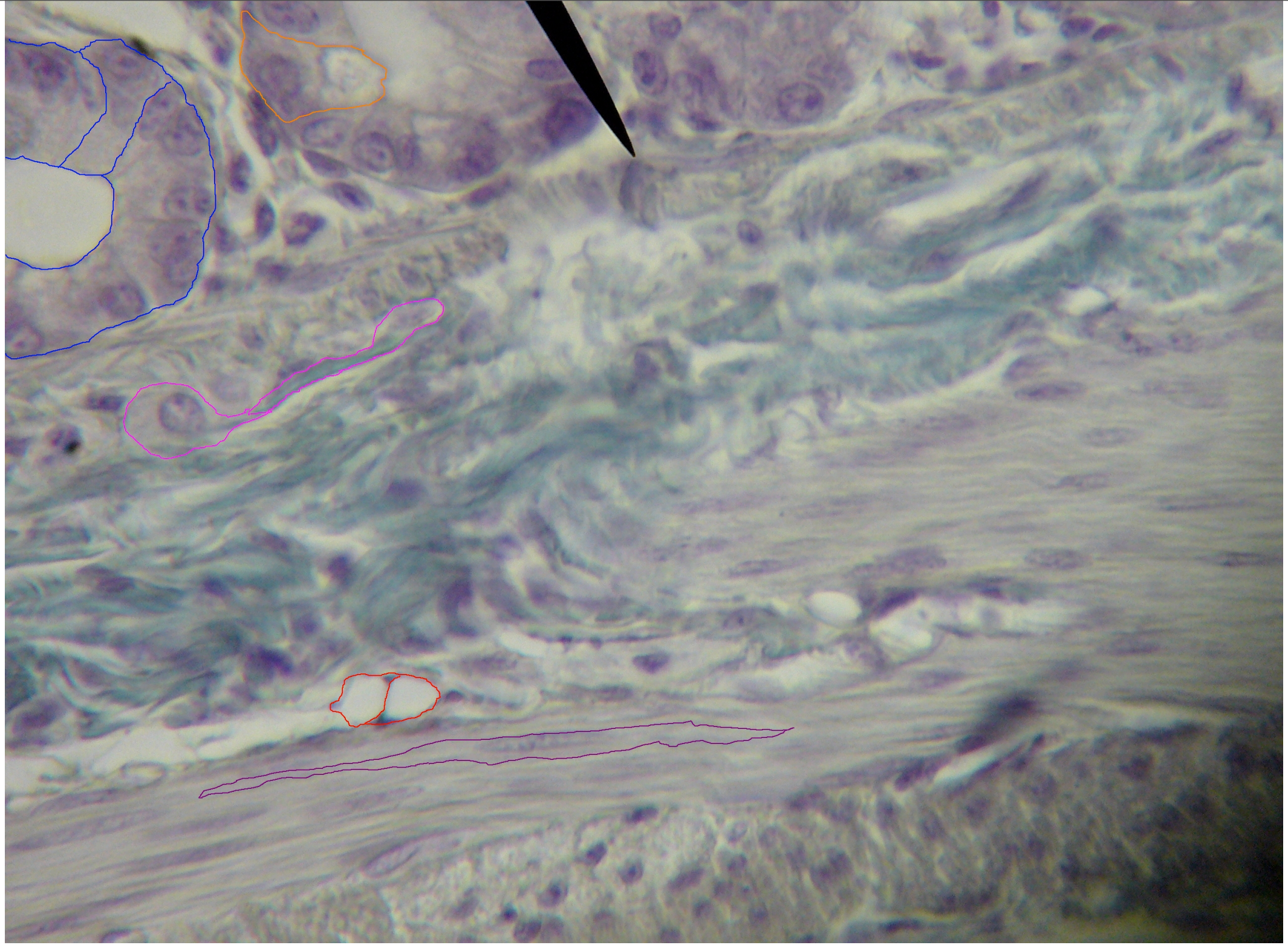
X/Y

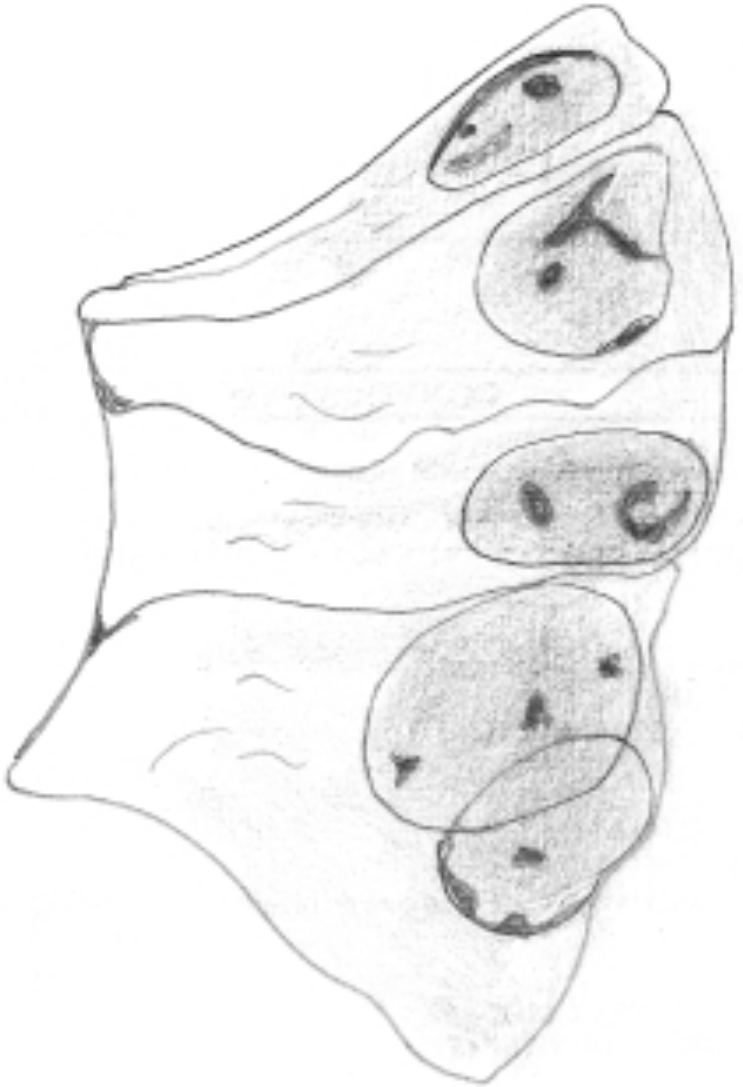


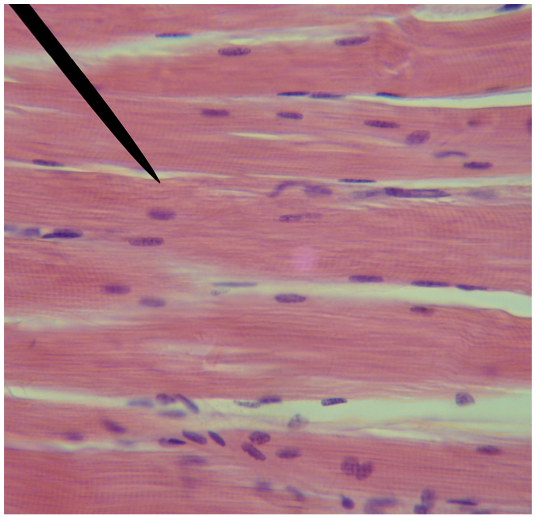


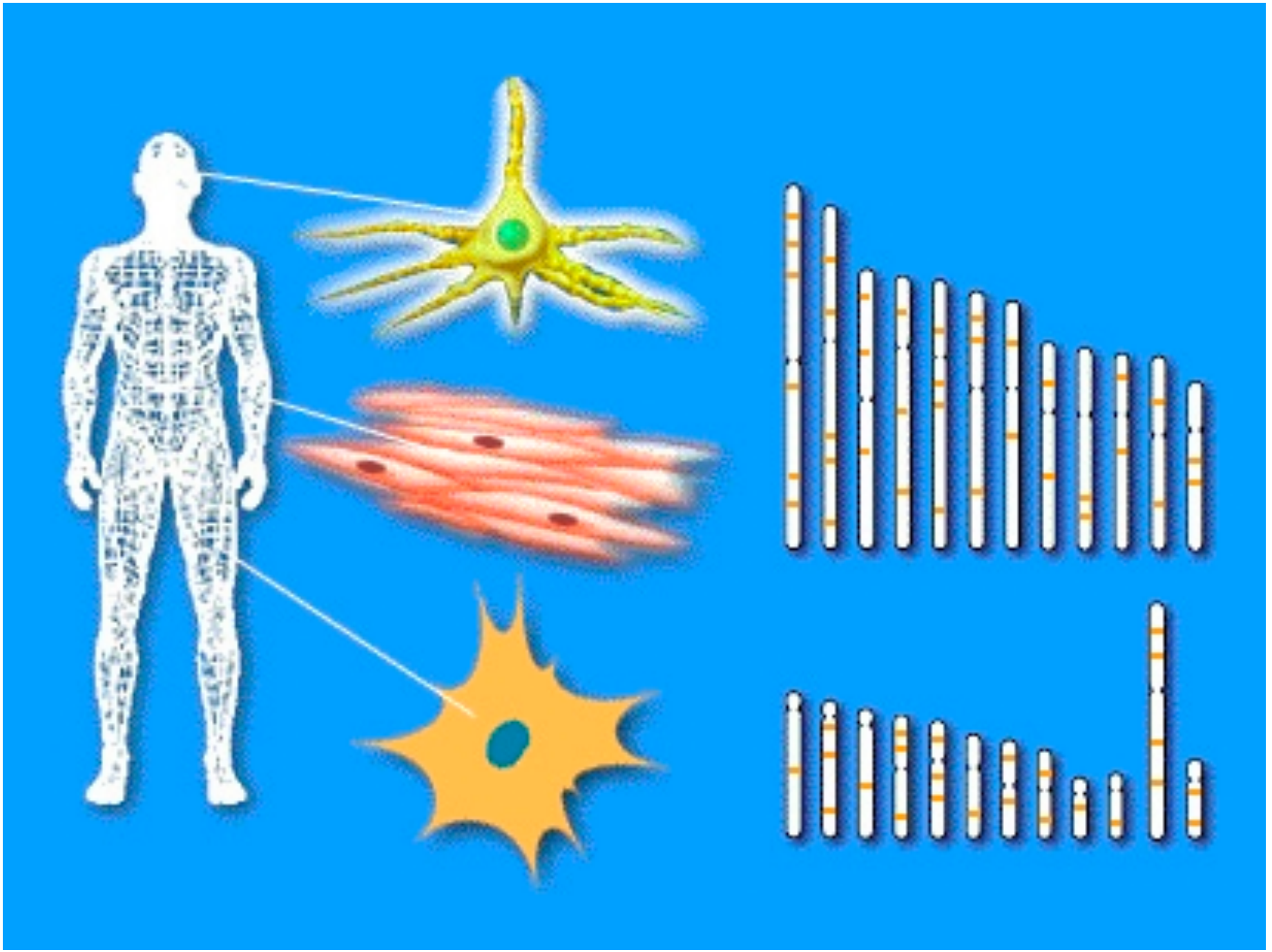
Paires d'allèles	Hématies	Groupe
Paire de chromosomes N°9 		A
		B
		AB
		O

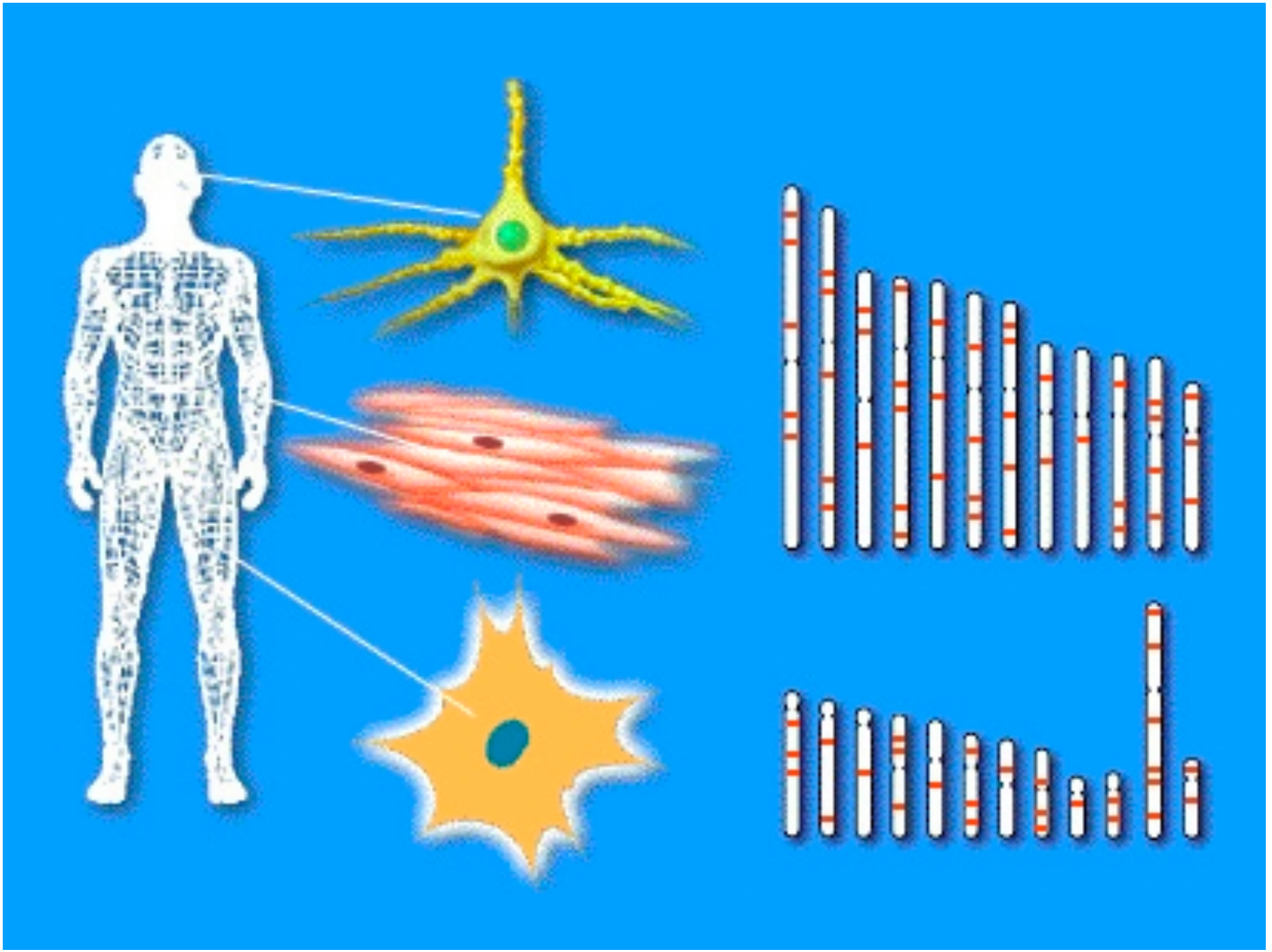


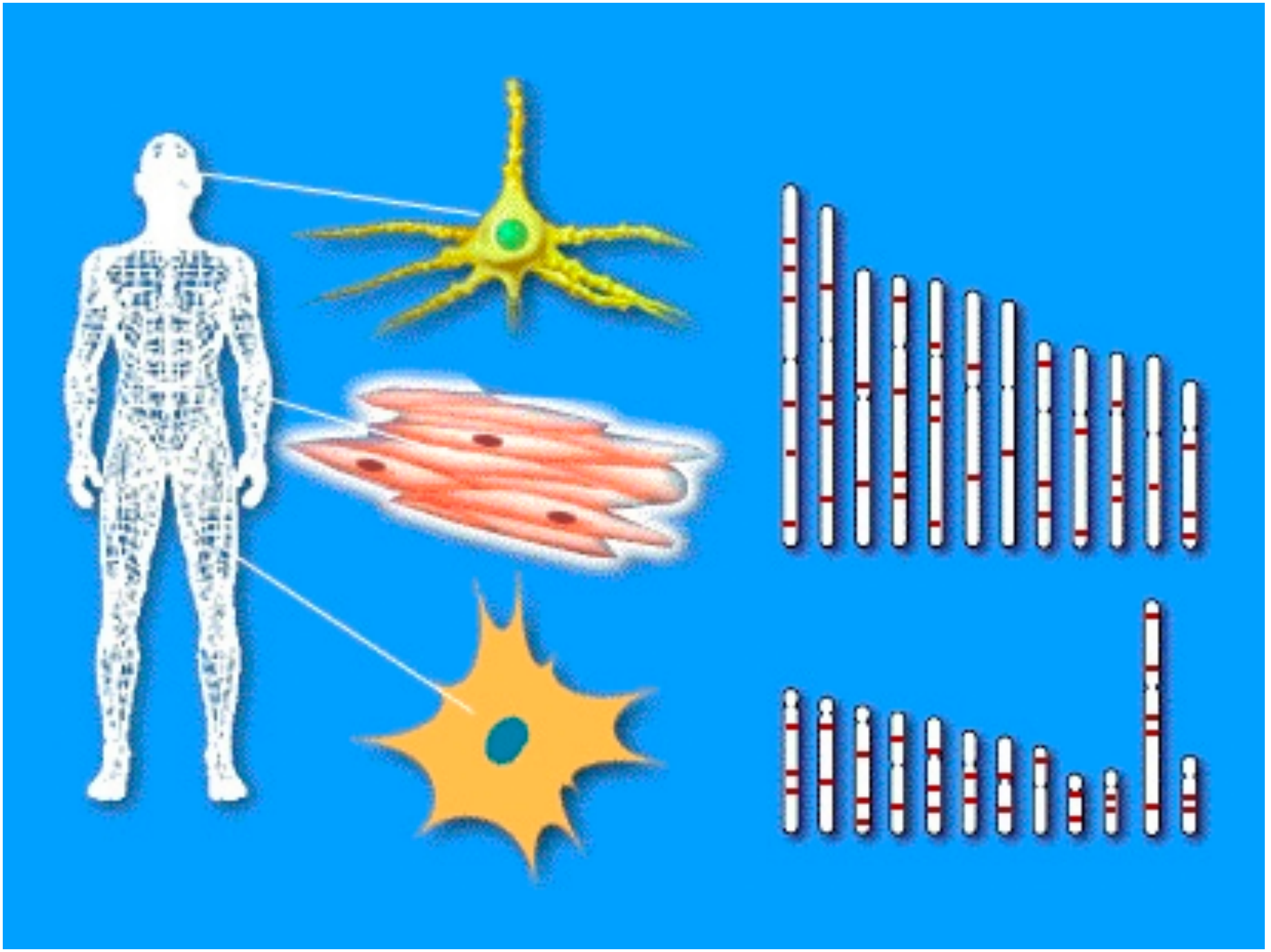




cellule	musculaire	sécrétrice	sanguine
Aspect (proportions non respectées)			
Propriétés	capable de se contracter	fabrique et libère diverses molécules	Transporte le O_2 (hématies) Défends l'organisme (leucocytes)







Videos:
clonage
par transfert de noyaux de cellule somatique

Tiré du cours d'été 2006 - cellules souches - du HHMI (2006 Holiday Lectures Potent Biology: Stem Cells, Cloning, and Regeneration Presented by HHMI investigator Douglas A. Melton, Ph.D., and EMBL senior scientist Nadia Rosenthal, Ph.D.)

Principe de la méthode (animation)

Stem Cells and the End of Aging

Podcast HHMI's Holiday Lectures Video Clips
Épisode 2006 Stem Cells – Cloning by Somatic Cell Nuclear Transfer…

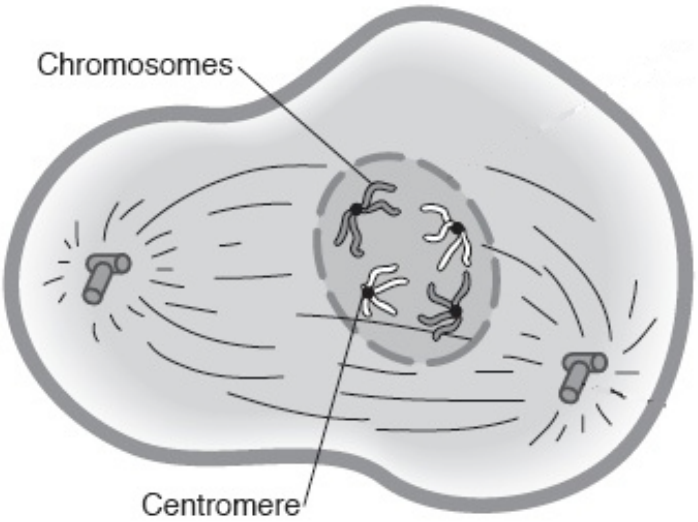
Réalisation pratique

Understanding Embryonic Stem Cell

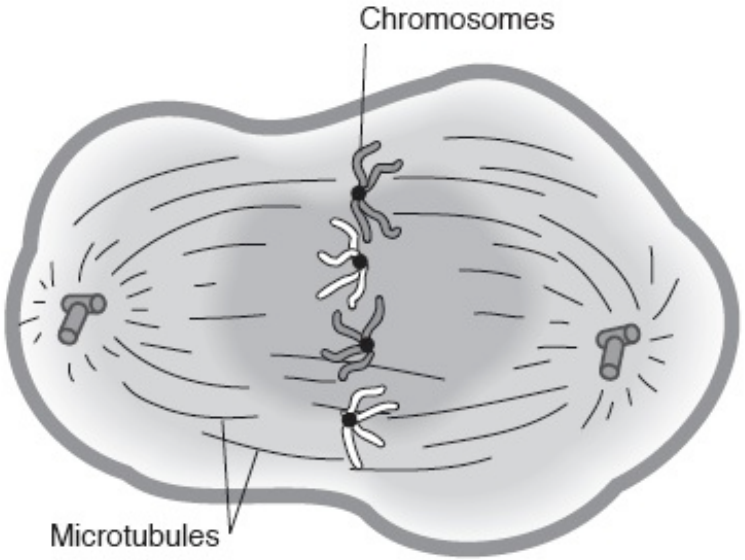
Podcast HHMI's Holiday Lectures Video Clips
Épisode 2006 Stem Cells – Somatic Cell Nuclear Transfer (SCNT)

- Accès par le service de recherche video du HHMI
- Accès par les podcasts du HHMI (choisir 2006 stem cells)
- Accès direct aux séquences video de ce cours

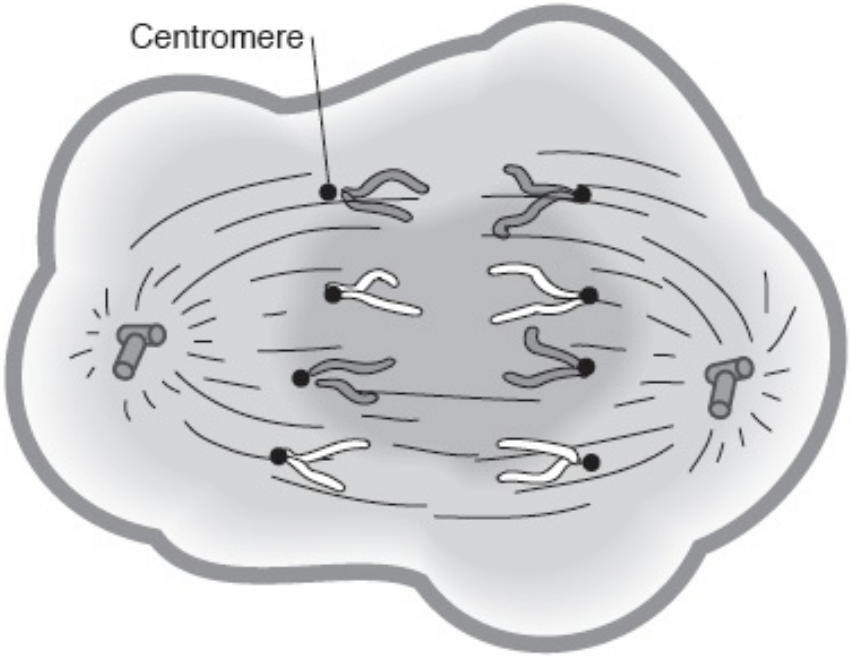
HHMI
HOWARD HUGHES MEDICAL INSTITUTE


Chromosomes
Centromere

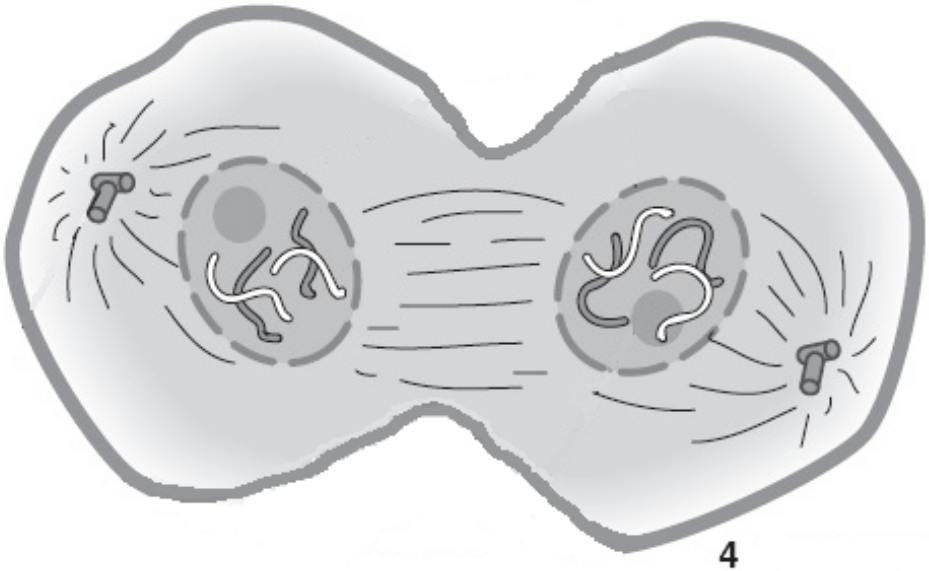
1


Chromosomes
Microtubules

2


Centromere

3



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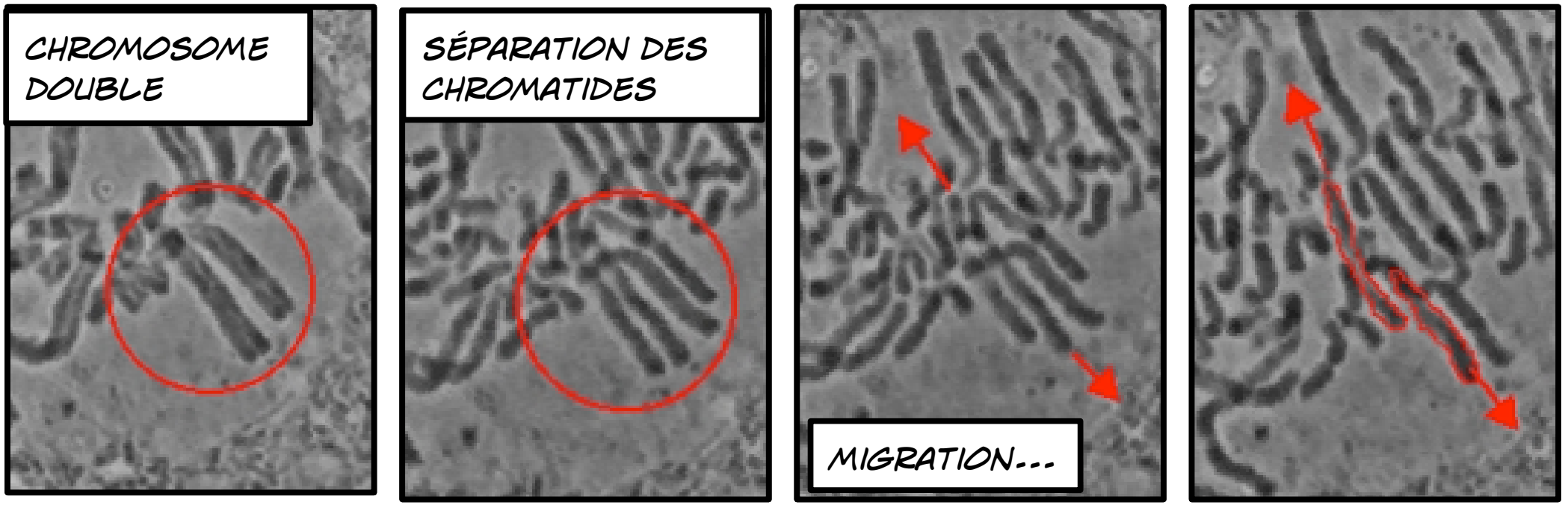
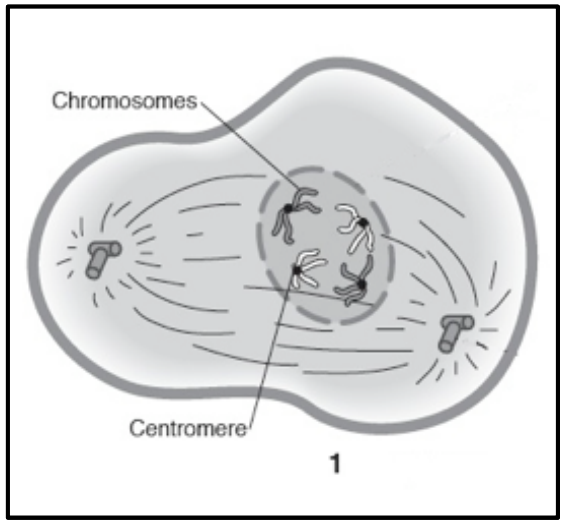
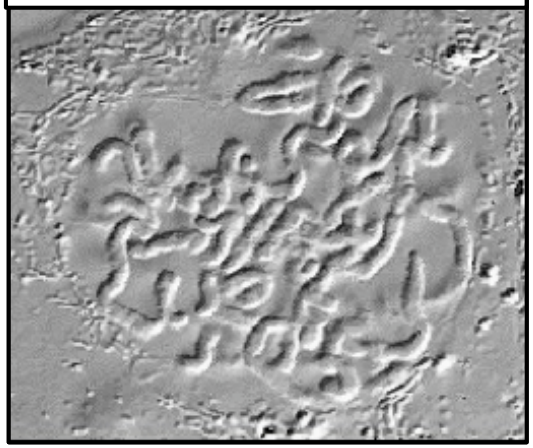
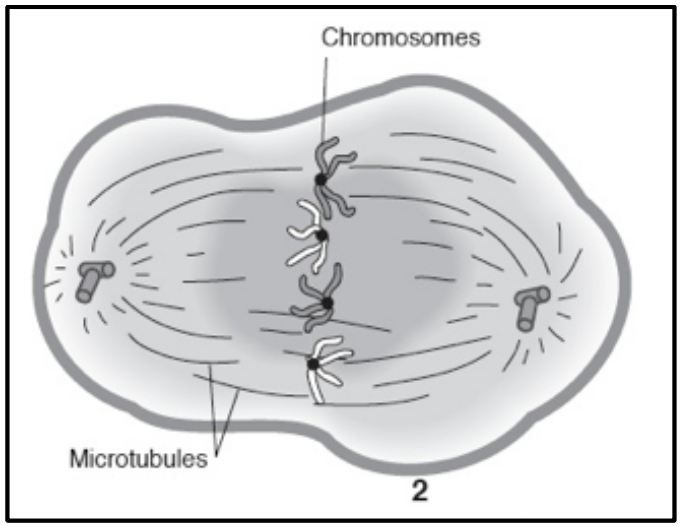


SCÈNE ORIGINAL

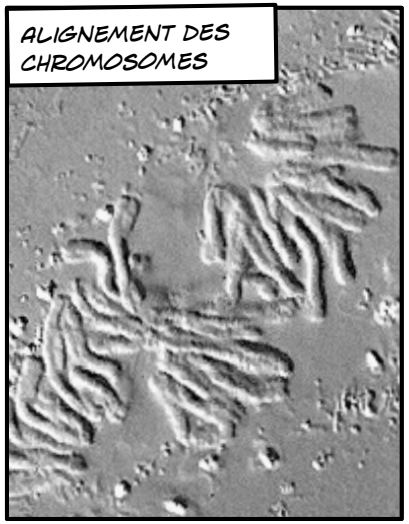


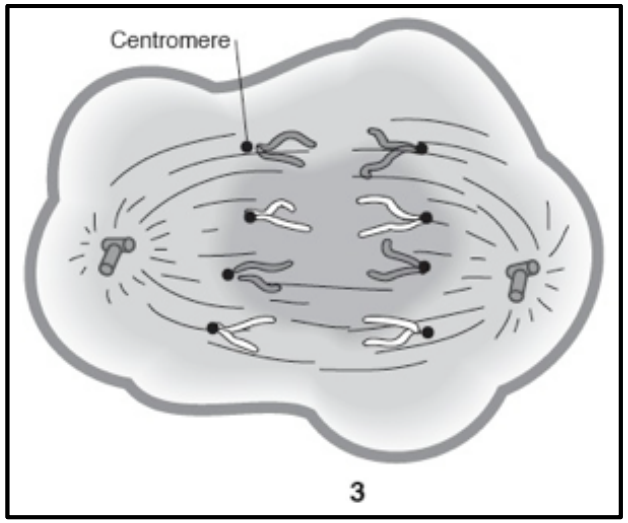
LES CHROMOSOMES DEVIENNENT VISIBLES



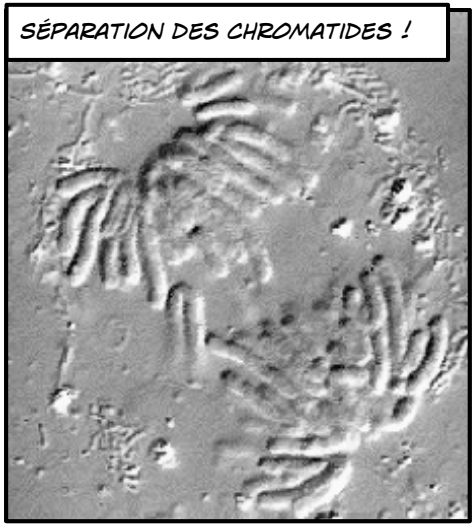


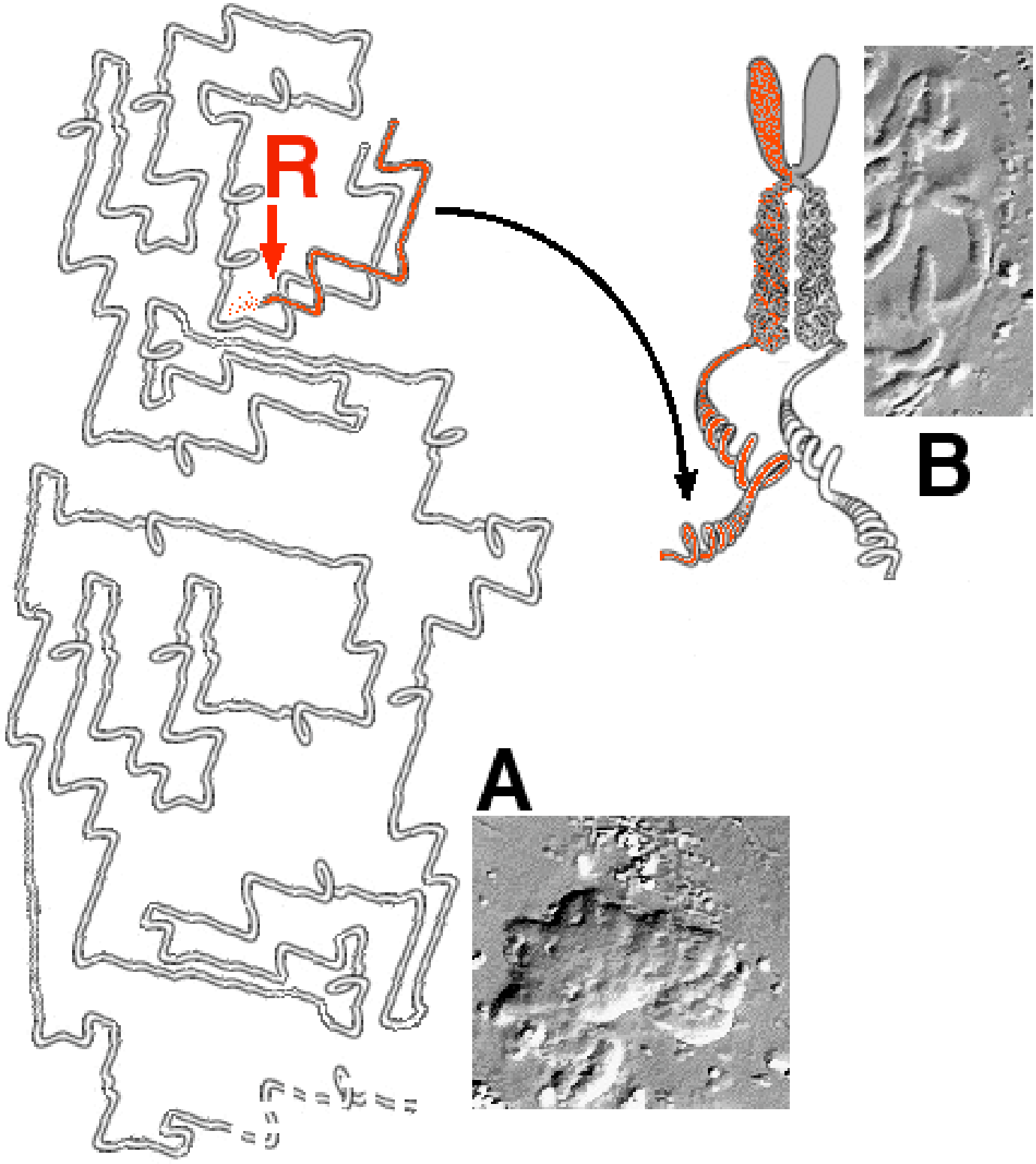
ALIGNEMENT DES CHROMOSOMES





SÉPARATION DES CHROMATIDES !




R
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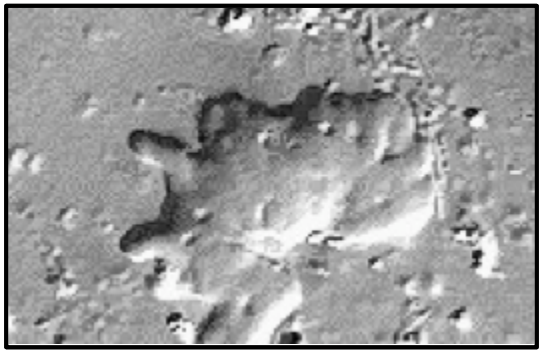
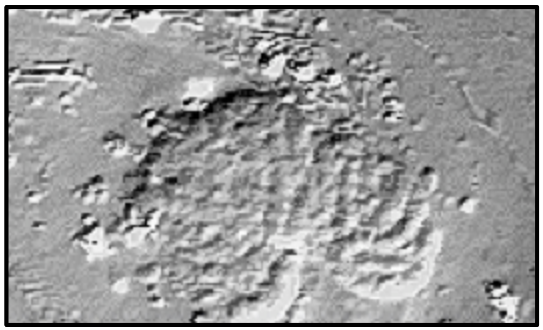
LA DISPARITION DES CHROMOSOMES

LES CHROMATIDES VIENNENT DE MIGRER ET SE RASSEMBLENT

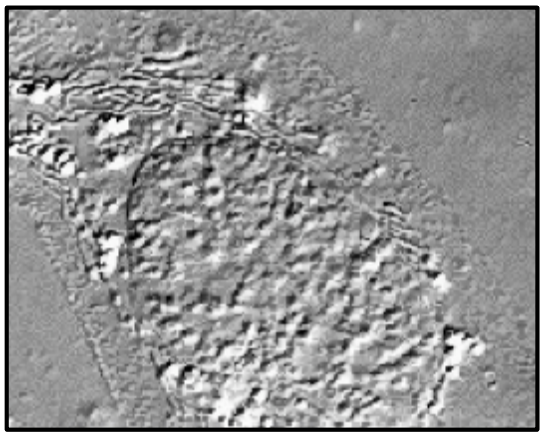
LES CHROMATIDES DEVIENNENT INDISTINCTES



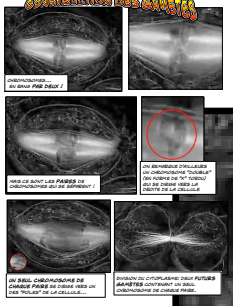
UN NOUVEAU NOYAU EST EN TRAIN DE SE FORMER. LES CHROMOSOMES SE DÉBOBINENT, REDEVIENNENT DES FILAMENTS QUI S'ENTREMÊLENT.



LA NOUVELLE CELLULE POSSÉDE MAINTENANT UN NOYAU LARGE, PLAT, CONTENANT DES CHROMOSOMES DÉROULÉS, UTILISABLES.



CONSTRUCTION DES GAMÈTES

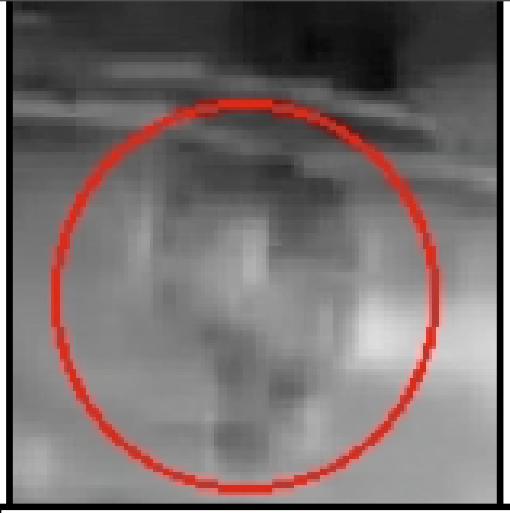


CHROMOSOMES...
EN RANG **PAR DEUX !**

MAIS CE SONT LES **PAIRES** DE CHROMOSOMES QUI SE SÉPARENT !

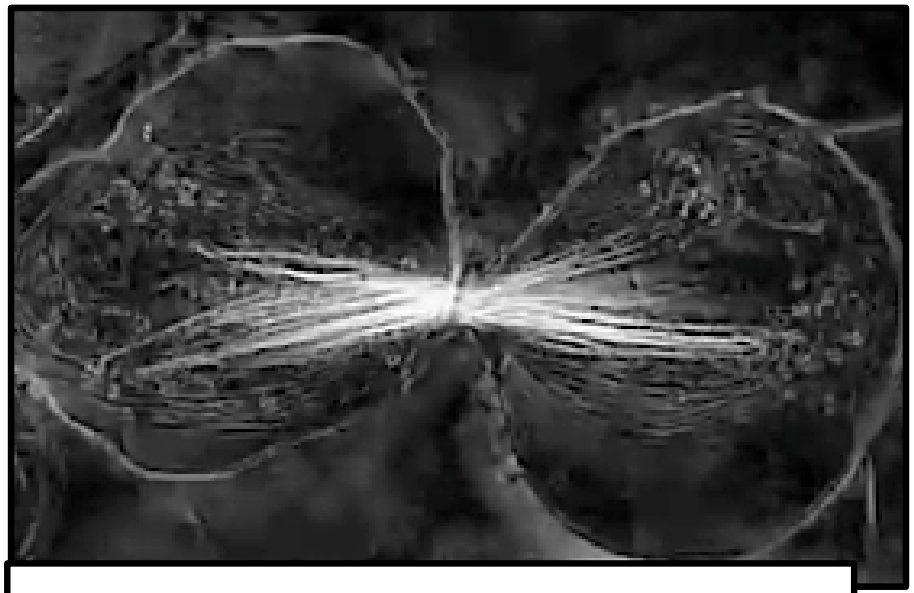
ON REMARQUE D'AILLEURS UN CHROMOSOME "DOUBLE" (EN FORME DE "X" TORDU) QUI SE DIRIGE VERS LA DROITE DE LA CELLULE

MAIS CE SONT LES **PAIRES** DE CHROMOSOMES QUI SE SÉPARENT !

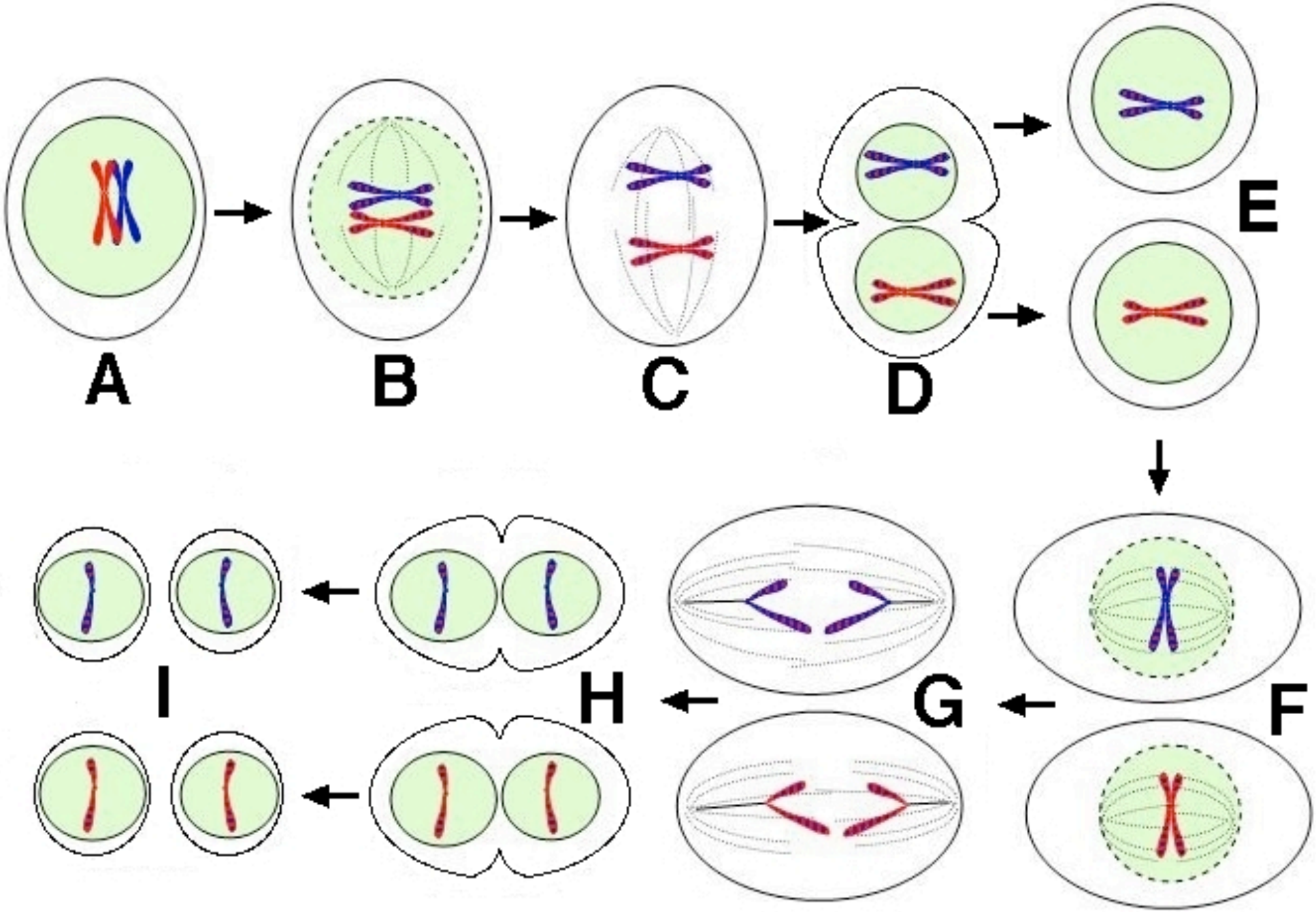


ON REMARQUE D'AILLEURS UN CHROMOSOME "DOUBLE" (EN FORME DE "X" TORDU) QUI SE DIRIGE VERS LA DROITE DE LA CELLULE

UN SEUL CHROMOSOME DE CHAQUE PAIRE SE DIRIGE VERS UN DES "POLES" DE LA CELLULE...



DIVISION DU CYTOPLASME: DEUX **FUTURS GAMÈTES** CONTENANT UN SEUL CHROMOSOME DE CHAQUE PAIRE.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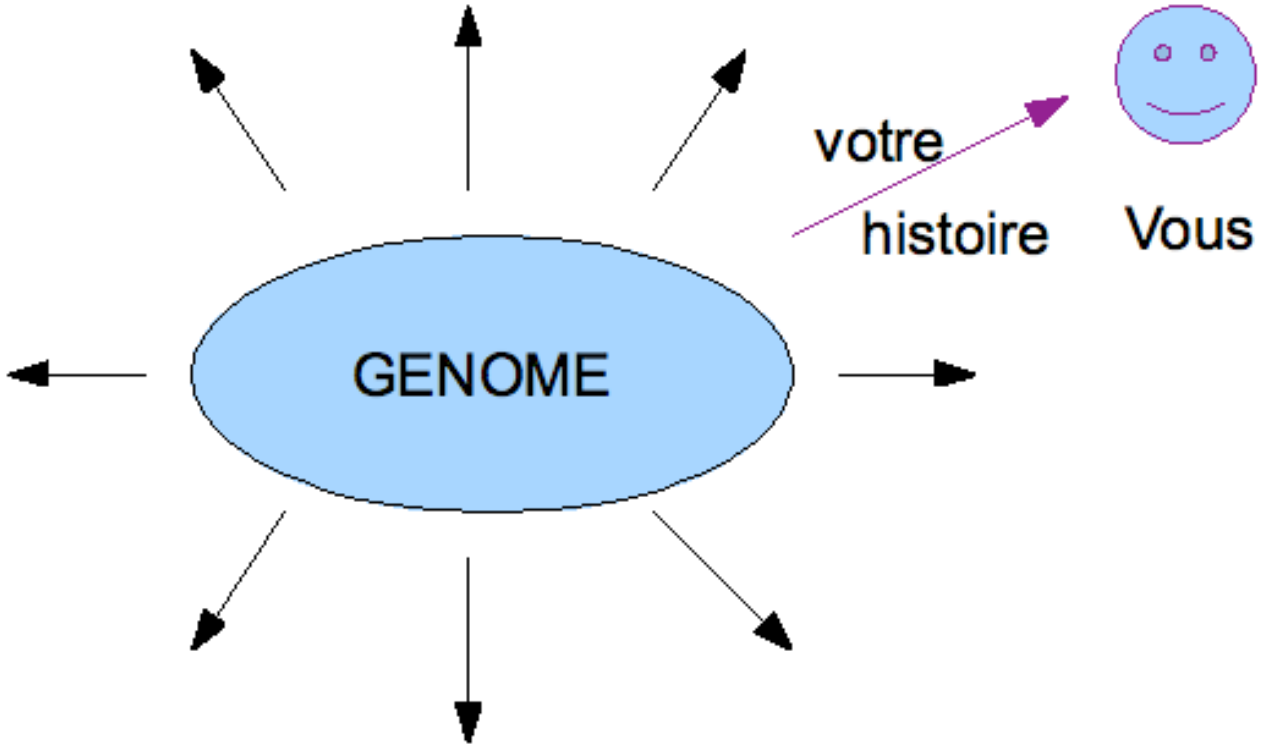
votre
histoire
Vous
GENOME