Cheatography

Unit 4 Cell Communication Cheat Sheet by 24liqinhan via cheatography.com/184795/cs/38626/

Feedback

Homeostasis	set of conditions under which living things can successfully survive
Negative feedback/- feedback inhibition	turning itself off using the end product of the pathway.
positive feedback	further stimulates the pathway, for example more and more X is made

The Cell Cycle

Interphase (G1, S, G2)not yet started to divide, regular activitiesS phase: replicates its genetic material, single chromosome in the nucleus is duplicated. sister chromatids held by centromere.G1 and G2: growth, performs metabolic reactions and produces organelles, proteins, and enzymes.These three phases are highly regulated by checkp- oints and special proteins called cyclins and cyclin-de- pendent kinases (CDKs). To induce cell cycle progre- ssion, an inactive CDK binds a regulatory cyclin, the complex is activated, the cell cycle continues. To inhibit cell cycle progression, CDKs and cyclins are kept separate.Iosing control of the cell cycle, such as mutation in a protein, may cause cancer. Mutated genes that induce cancer are called oncogenes.Mitosiscell divides into two genetically identical daughter cells + maintaining the proper number of chromosomes from generation to generation
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the normal cell cycle.
G0 temporarily nondividing until they get a signal to reenter

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The Cell Cycle (cont)

1.	Prophase:	chromatin	condenses
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2. Metaphase: chromosomes align in the middle.

3. Anaphase: chromatids are pulled apart.

4. **Telophase**: the cell completes splitting in two. **cytokinesis** : split along a cleavage furrow (animal)/ cell plate (plant)

* Mitosis is involved in growth, repair, and asexual reproduction, so not happen in sex cell.

Cell Communication in plants

plants do not have a nervous system but can produce several proteins found in animal nervous systems, such as certain neurotransmitter receptors.

response to environmental stimuli, link environmental cues to biological processes, communicate with nearby plants.