C2.1 Chemical signalling (HL)

What the Cell · DP Biology · note-taking sheet · HL statements C2.1.1–14

Name _____ **Date** _____

How to use this sheet: go through the slides and videos with it, then close them and write from memory. Use your own words and add page numbers from the book (pp. 450–466) where you want more detail.

Guiding questions. How can cells tell apart the many signals reaching them? What happens inside animal cells when a chemical signal arrives?

C2.1.1–5 Signals

Ligands and receptors. How does quorum sensing work in *Vibrio fischeri*?

Category	Travels	Example
Hormone		
Neurotransmitter		
Cytokine		
Calcium ions		

C2.1.6–11 Receptors and transduction

Transmembrane and intracellular receptors compared:

Flow charts: acetylcholine receptor; G protein-coupled receptor; adrenaline and cAMP; insulin and GLUT4.

C2.1.12–14 Steroids and feedback

How steroid hormones change gene expression. Targets of oestradiol and progesterone.

Positive and negative feedback, with an example of each:

Before you finish

Tick the ones you can explain without notes. Circle anything to ask about.

- ☐ Ligand
- ☐ Quorum sensing
- ☐ Signal categories
- ☐ Chemical diversity
- ☐ Local and distant
- ☐ Receptor types
- ☐ Transduction
- ☐ ACh receptor
- ☐ G proteins
- ☐ cAMP
- ☐ Insulin and GLUT4
- ☐ Feedback