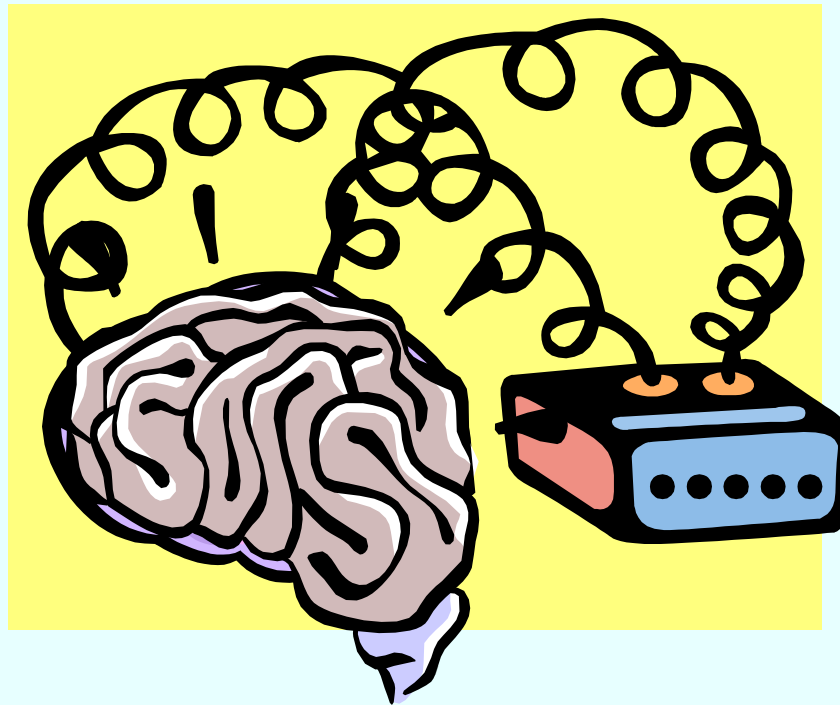


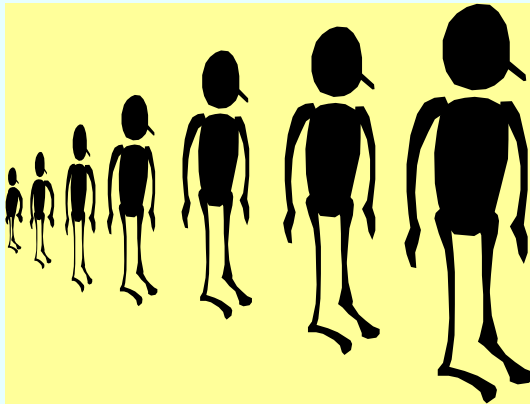
What's Going On Up There?

Significant Brain Development Research



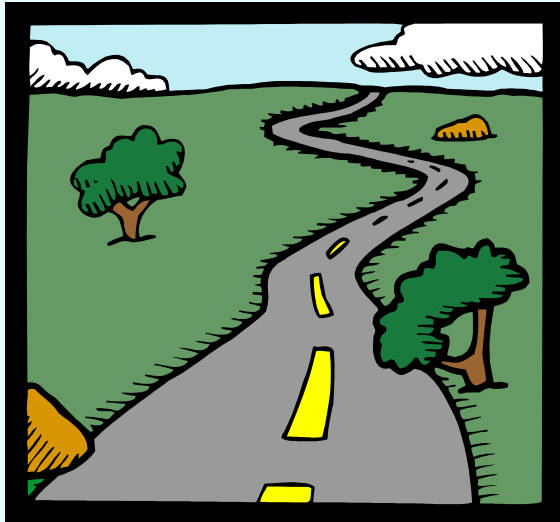
What's Going On Up There?

Bodies -- cells



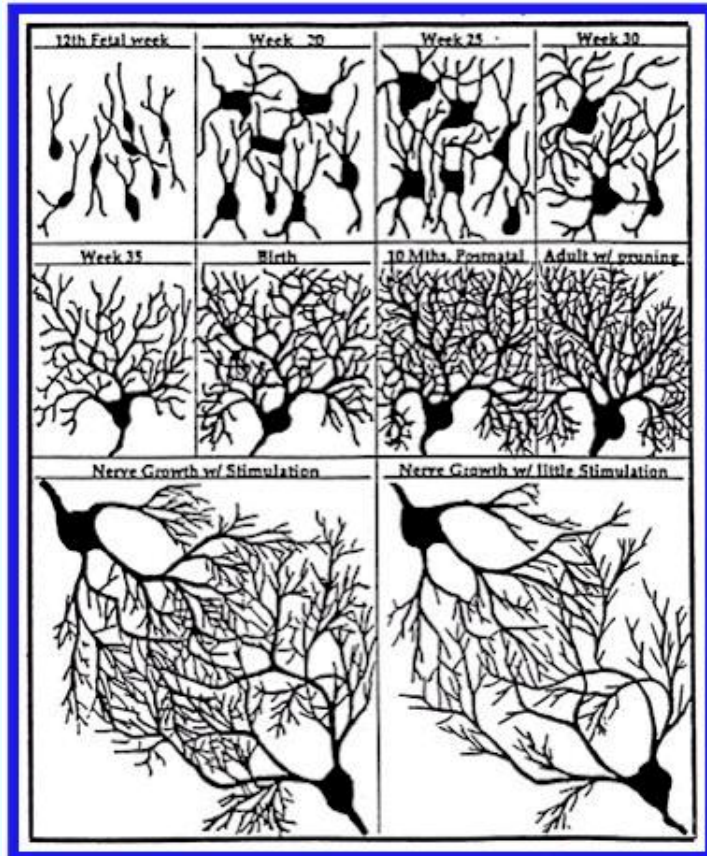
Brains -- connections between cells

What's Going On Up There?



- Brain has ~100 billion cells at birth
- Like little towns with no roads
- Needs roads or “pathways” between cells.

What's Going On Up There?



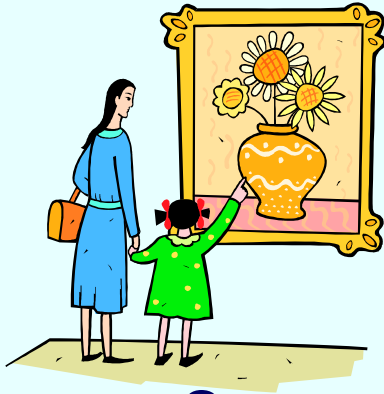
Pathway development:

- Before birth
- Sensory stimulation
- Electrical impulses
- Pathways
- Repetition = strength

Image from www.kiddsmart.com/neuron%20graph.htm

What's Going On Up There?

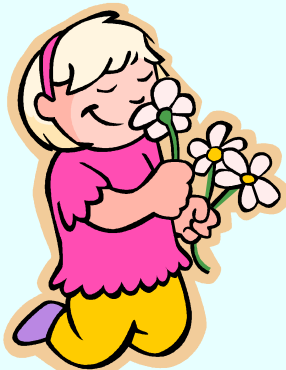
Make brain pathways!



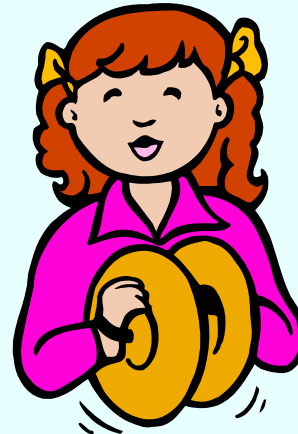
See



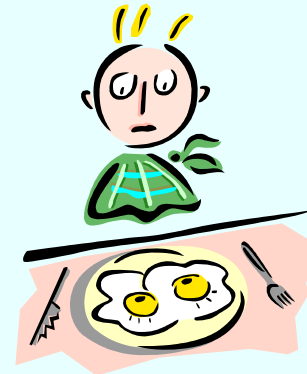
Touch



Smell



Hear

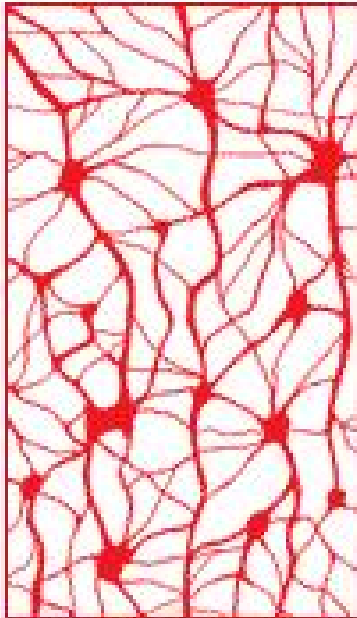


Taste

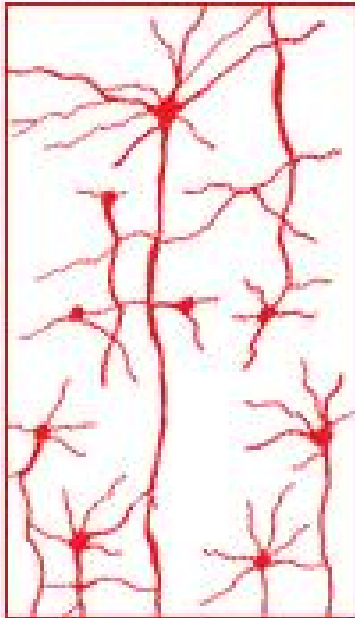


What's Going On Up There?

Brain cell connections



section of a
stimulated brain



section of an
unstimulated brain

Unstimulated brains:

- Few pathways
- Pruning
- Pathway development slows

“Brain Cell Connections” image from www.acceleratedlearning.com/preschool/concept.htm



What's Going On Up There?



Window of opportunity:

- Build brain pathways:
- Ages birth - 5
- Sensory activities
- Repetition