1. **Definition:**
Sequential process throughout development by which one embryonic region interacts with a second region to influence that second region's differentiation or behavior.

![Diagram showing induction](image)

2. **Discovery of Induction:**
- Nieuwkoop experiments

 Vegetal endoderm induces mesoderm

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**Summary of the experiments of Nieuwkoop and those of Nakamura and Takasaki,** showing mesodermal induction by vegetal endoderm. Isolated animal cap cells become a mass of ciliated epidermis, isolated vegetal cells generate gutlike tissue, and isolated equatorial (marginal zone) cells become mesoderm. If the animal cap cells are combined with vegetal hemisphere cells, many of the cells of the animal cap generate mesodermal tissue.