CONCEPT: SIGNALING IN PLANTS

- Signaling evolved _____ in plants and animals
    - □ Plants have receptor kinases but their largest class are serine/threonine kinases
    - □ No plant homologs exist for important signaling molecules like JAK/STAT, Notch, Wnt, Hedgehog
- There are six classes of plant signaling molecules

Signaling Molecule	Function
Auxins	Stimulate plant growth
Gibberelins	Stimulate stem elongation
Cytokinins	Stimulates cell division
Absicsic acid	Stimulates cell dormancy
Ethylene	Stimulates fruit ripening
Phytochromes	Sense light and signal for some function

PRACTICE:

1. True or False: Plant and Animal signaling evolved differently.
    a. True
    b. False

2. Which signaling molecule stimulates fruit ripening?
    a. Auxins
    b. Ethylene
    c. Phytochromes
    d. Gibberelins