Combined Science - Biology - KS4 Organisation

# Plant Roots

(Downloadable student document)



## Independent Task

#### Explain how water enters a plant. (4)

### <u>Help</u>

- Where does water enter the plant?
- What process does water move by?
- What are the concentrations of solution?
- Does is move up or down a concentration gradient?



# Independent Task

### Explain how substances enter the plant at the roots (6)

### <u>Help</u>

- What process does water enter the roots by?
- How concentrated are the solutions in the soil and root hair cell?
- Does it move down or against a concentration gradient?
- What process do mineral ions enter the roots by?
- What is the concentration of mineral ions in the soil and root hair cell?
- Does it move down or against a concentration gradient?



## Independent Task

Describe and explain adaptation of the root hair cell that make the movement of substances into the roots more efficient (4)

