Transport system in plants

BRYN Looking forward to the game?

RHYS Yeah, it's going to be a close one but I think we'll do it.

NICK Should be a good game today boys. The Blues will walk all over you though.

And we'll be watching with these free tickets for the VIP box!

BRYN Great. Between Nick and the public transport system, I'm starting to think this game is cursed.

ALFRED Analysing… Did you mean ‘Transport system in plants’?

BRYN No Alfred! We’re just trying to…

ALFRED For photosynthesis to occur, a plant needs water.

As water is drawn in through the roots, water molecules are transported via tissue called xylem, up the stem, into the leaves.

Excess water molecules are sent to pores in the leaves called stomata, where they are released and evaporate into the atmosphere. This is called transpiration.

Transpiration helps to regulate water levels in the plant, controlling temperature, but most importantly, water leaving the leaf causes suction which helps draw water up through the roots. Just like drinking through a straw.

Precisely!

Sucrose and food molecules generated by photosynthesis travel to the parts of the plant that need energy. Tissue called phloem transport the sucrose, nutrients, and other food molecules to the fruit and seeds for storage as starch, as well as the roots that

need the energy to absorb the water. The phloem transports the nutrients up and down the plant. This is called translocation.

BRYN Thanks Alfred. That helped pass the time nicely.

RHYS Hey, I think that curse is lifting.

NICK I'm telling you… these are VIP tickets!