

Exchange Surfaces 2 MS

QUESTION 1

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)i)	root hairs	if clear which word then allow	1
a)ii)	xylem	if clear which word then allow	1
a)iii)	stomata	if clear which word then allow	1
a)iv)	storage organs phloem		2
Total marks			5

QUESTION 2

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)	oxygen / O ₂ or carbon dioxide / CO ₂	allow O ₂ do not accept O ₂ allow CO ₂ do not accept CO ₂	1
	any four from: • because structure X / gills has threads / filaments or is thin or tadpole has longer tail • there is an increased surface area • there is a shorter diffusion pathway • therefore an increase in exchange • eyes (now visible in older tadpole) • so that food / danger etc can be seen	ignore references to tail used for locomotion ignore reference to nostrils 4 ignore food accept reference to a good blood supply accept increased water flow over gills / tail will increase diffusion of gases	4
Total marks			5

QUESTION 3

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)	(there are) many hairs or thin hairs or hairs are one cell thick (which gives) large / increased surface area or short diffusion pathway (so there is) more diffusion / osmosis (of water into the root)		3
Total marks			3