

Moss Safari: what lives in moss?

Big five worksheet

Observation worksheet

Organism	Number	Structure and adaptations	Behaviour notes
	observed		
Moss mites			
(Oribatida)			
Nematodes			
Tardigrades	+		
Rotifers			
Gastrotrichs			



Adaptation worksheet

Organism	Adaptations	How does this help them to survive?
Moss mites	Thick exoskeleton.	
(Oribatida)	Only live in moss during favourable	
(Olibatida)	conditions.	
	Move into damper habitats when	
	moss dries out.	
Nematodes	Have a sticky tail to secure to moss	
	leaves and stems.	
	Migrate deeper into moss as it dries	
	 Curl up under unfavourable 	
	conditions, reducing surface area.	
	Under unfavourable conditions can	
	go into a dormant state	
	(cryptobiosis).	
Tardigrades	Have claws to grip to moss leaves	
	and stems.	
	Some have thick cuticles.	
	Reproduce sexually and asexually.	
	Under unfavourable conditions, they	
	go into a 'tun' state, an extreme form	
	of cryptobiosis.	
	Tuns can survive extreme	
Detterre	temperatures and even radiation.	
Koulers	Have sticky toes to secure to moss	
	 Can contract into a dormant state 	
	(cryptobiosis) under unfavourable	
	conditions for an extended time	
	(sometimes thousands of years).	
	Reproduce asexually.	
	• Eggs can survive dehydration.	
Gastrotrichs	Have a sticky tail to secure to moss	
	leaves and stems.	
	• Very short lifespan of a few days.	
	Reproduce asexually.	
	 Lay two types of egg: 	
	Type 1 hatches very quickly.	
	Type 2 hatches only under	
	favourable conditions, often after	
	many years.	