Moss Safari: what lives in moss?

Big five worksheet

Observation worksheet

<table>
<thead>
<tr>
<th>Organism</th>
<th>Number observed</th>
<th>Structure and adaptations</th>
<th>Behaviour notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moss mites</td>
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<tr>
<td>(Oribatida)</td>
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<tr>
<td>Nematodes</td>
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<td>Tardigrades</td>
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<td>Rotifers</td>
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<tr>
<td>Gastrotrichs</td>
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## Adaptation worksheet

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