**ACTIVITY THREE: DID YOU KNOW THAT CREEPY CRAWLIES CAN TELL US HOW HEALTHY A STREAM IS?**

Certain water creatures are known as ‘indicator species’. This means their presence in a river, stream or pond indicates polluted or unpolluted water. Within this LIFE ORIENTATION lesson learners look at the relationship between water creatures and water quality and water creatures and our health.

Teacher, write the names of the water creepy crawlies below on the chalkboard:

- Mayfly
- Mosquito
- Leech
- Planaria
- Sludge Worm
- Dragonfly
- Water boatman
- Water Snail

With your class and using the ‘More information on each of the water creatures’ pages from Activity One, write down any words that link to the animals above.

**AS A CLASS, DISCUSS THE FOLLOWING QUESTIONS:**

1. Which water creepy crawlies can cause ill health or disease in people?
   - Leech, Mosquito, Water Snail

2. What illnesses can you get from each of these?
   - Low blood pressure, Malaria, Bilharzia

3. If you find a sludge worm in the water, what is it telling you about the health of the water?
   - That the water is most likely polluted.

4. Which water creatures tell us the water is unpolluted and clean?
   - Planaria, Mayfly

5. What type of water can a dragonfly larvae live in?

6. Give 3 different ways that water can be polluted?
7. If you found two ponds of water and the one was filled with leeches, sludge worms, and mosquitos and the other had a few planaria and water boatman living in it, which one would you choose for your drinking water?
   - **Planaria pond**

8. Why is it important to ensure that the water we drink is safe to drink, wash in and use for cooking?

9. How can we help to make sure our streams and rivers are not polluted?
   - **Some examples are:** We can clean up our local wetlands, rivers and streams; we can make sure we throw our waste away properly; we can write to our local councillors and municipality; we can report people and businesses who we see are polluting our rivers and streams; we can decide never to use rivers or streams as a toilet.

10. What can you do to make sure you do not get any diseases from water?
    - **Do not use water from dirty pools of water where cattle and human faeces (poo) can be found; boil all water first when collecting from natural healthy water sources; make sure that the water is collected from clean, fast flowing waters; do not swim and play in rivers or streams that are very close to where people live (like a town or city) and have lots of litter and rubbish lying in and around them.**

**Criteria to assess learners during this life orientation lesson**

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<thead>
<tr>
<th>Criteria</th>
<th>Exceeded requirements of the Learning Outcome</th>
<th>Satisfied requirements of the Learning Outcome</th>
<th>Partially satisfied requirements of the Learning Outcome</th>
<th>Not satisfied requirements of the Learning Outcome</th>
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</thead>
<tbody>
<tr>
<td>The learner was able to match certain water insects with water quality (i.e. the leeches and sludge worms indicated poor water quality but the planaria and water boatman indicated good/better water quality)</td>
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<td>The learner was able to explain what he/she was doing</td>
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