

# **Mushroom Murder Mystery Leader's Crib Cards**

**1.**

- **Divide group equally into trees and fungi**
- **Move the trees into a rough semi-circle** (not too far away, just enough that the fungi have to move around to find their tree)

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**2.**

- **Give out bags, explaining briefly how to use them** (i.e. Don't look in them yet, they have clues you need to take out when instructed)
- **Fungi can't get their energy directly from the sun** (brief review of the 3 methods that they use - food exchange, recycling and killing their host! Mention that one tree will die here!)

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**3.**

- **Trees look in your bags and find your leaves. Keep them out.** (They don't need to say what they are yet)
- **Fungi often start their life as a spore.** (The spore germinates and a minute tube emerges. Life is complicated, and the fungus cannot guarantee that its spore will land on a suitable food source - many fungi can only live with a particular species. All our fungi will find a host, but each tree can only have one fungus)

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**4.**

**Fungi look in your bags and find your leaves (attached to the drawstring) and I will dust you with spore powder to set you off to find a tree with the same leaf as you. Remember that each tree can only have one fungus in this case-if the tree is already occupied, you have to move on to another.**

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**5.**

**When all are matched up, explain when toadstools occur and what they are for. If the conditions are right, some may fruit (find cocktail umbrellas and put them up) and this is when we can identify you. Fungi look at your photos now.**

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**6.**

**Go around the wood (make sure you go to larch last) and ask each pair in turn to identify themselves. If they are mycorrhizal partners, they should exchange mineral salts and sugars now. If saprotrophic, they should produce the recycling card and leaves / twigs – explain the relationship. As each pair is revealed they can shed their own spores!**

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**7.**

**The last to be revealed should be the larch / cauliflower fungus. The larch can die (as dramatically as it likes) and should then search it's bag for the piece of wood / quivery beetle. Can anyone explain the wood with the beetle holes and thus why the death of the tree is important to the woodland ecosystem?**

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**8.**

**Before gathering up the bags, ensure that the salts and sugars have been swapped back! Make sure all the items go back into the correct bags - list overleaf.**

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**8.** (reverse side)

***Fungus bags contain:*** un-named picture of leaf (attached to drawstring), pot of spores, named photo of fungus, cocktail umbrella. If yellow background, pot of mineral salts. If green background, recycling symbol.

***Tree bags contain:*** Named picture of leaf. Birch, beech and pine should have pot of sugars. Hazel, oak and elm should have leaves or twigs. Larch should have piece of dead wood with beetle galleries, or a quivery bug.

***Leader's bag contains:*** Pot of spores. Prompt cards. Spare salt, sugar and spore pots.