FUN WITH FUNGI
Post-Trip Activities

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Grades 3-12 [INCOMPLETE]

1. SPORE PRINTS

The umbrella-type of fungi are the most suitable for prints. Avoid all poisonous varieties. (These are identified in any of the numerous field guides around.) Fungi with white gills print well on dark paper, while those with black ones show up better on light paper. [Note: for purposes of identification, many mycologists recommend white paper for more precise identification of light-colored spores.] Pick and handle the mushrooms very gently. Cut away the stem flush with the rim and place the fungus, gills down, on a sheet of paper. Cover it with an inverted bowl or jar to prevent drafts affecting your print. After a little time, the spores will have been released onto the paper, making a perfect image. Some release enough spores for a good print in an hour, others release theirs more slowly and need to be left overnight. A mushroom of the same type, similarly cut and placed on a sheet of paper but left uncovered can be lifted at intervals to check the release rate. Don't leave your 'printing' cap too long as the definition of the lines is lost and the ridges of the spores fall and smudge. Make the print permanent by spraying with fixative spray (hair lacquer can be used for black prints) and remember that bracket fungi, puffballs and stinkhorns are unsuitable.

For variations try slightly elevating one side of your cover dish to get drafts and a wispy effect or put it on a windowsill or use no cover or let insects (they often come with the mushroom anyway) walk across your print for interesting track patterns. You can overlap caps or make one print on top of another. Experiment! See what pattern variations" you like best and make some unique stationery!

2. DON'T LET THE LATIN SCARE YOU

Most of us are overwhelmed by the Latin names of' mushrooms. The best way to understand and remember terms is to understand first their component parts or roots. Below are listed some mushroom names and their meaning. Once their meaning 1s understood their occurrence in words seen later will immediately suggest the meanings of the new words.

Boletus bicolor, (bo-lee-tus) - "bi" means two (many of you have had bicycles with two wheels!) bicolor: of two colors, the common name is two colored Bolete. This mushroom is rose-red and yellow.

Clitocybe clavipes (cli-toss-a-bee, clav-i-pees) - "clava" means club, "pes" means foot - so it is a mushroom with the base or foot thickened like a club. The common name is fat- footed Clitocybe.

3. SPORE DISPERSAL GAME

Below is a list of types of mushrooms and how they release or distribute their spores. Ask the students to act out their parts and let the others try to guess what mushroom they are doing.

To distinguish between the two major classes of fungi:

Ascomycetes - have a sac (ascus) with the spores inside
Basidiomycetes - have a club (basidium) with the spores attached at the end like shish kebabs.

Fill a large trash bag (ascus) with small, inflated balloons (spores) that can be "released". And loosely tape four long, inflated balloons (spores) to the large end of a baseball bat (basidium) to be shaken off and "released".

MUSHROOM	SPORE DISPERSAL METHOD
Inky Cap	autodigest - enzymes destroy fungus taking everything, including spores down to the ground
"Stinkhorns"	true to their name they are very "smelly", carrion flies are attracted to the smell and as they walk on the fungus, spores stick to feet and are carried off
Puffballs	some of these fungi have a blowhole and when it rains, drops of rain fall and hit the sides and cause the spores to Jump out; others are like tumbleweed and blow around spilling their spores
Earthstars	the rays of these fungi are closed up and protective when it is sunny. When it rains the rays open up and the rain drops splash the spores around
Birds Nest	the spores look like small eggs on the ends of sticks and when the "eggs" are hit by water, they open and disperse their spores
Hat Thrower	these fungi grow on moose scat and the spores are thrown out when dry and ready
Bracket Fungi	on some species of these fungi, beetles gnaw holes through the fruiting body and the spores fall through the hole onto the ground.

Animals are also responsible for distributing spores by eating the mushroom and then excreting the spores in the scat. Some animals that do this are: slugs, turtles, deer, and squirrels. Squirrels and chipmunks also pick up mushrooms, carry them to a tree to dry and for future food storage, where they are often forgotten and the spores fall to the ground from the tree.