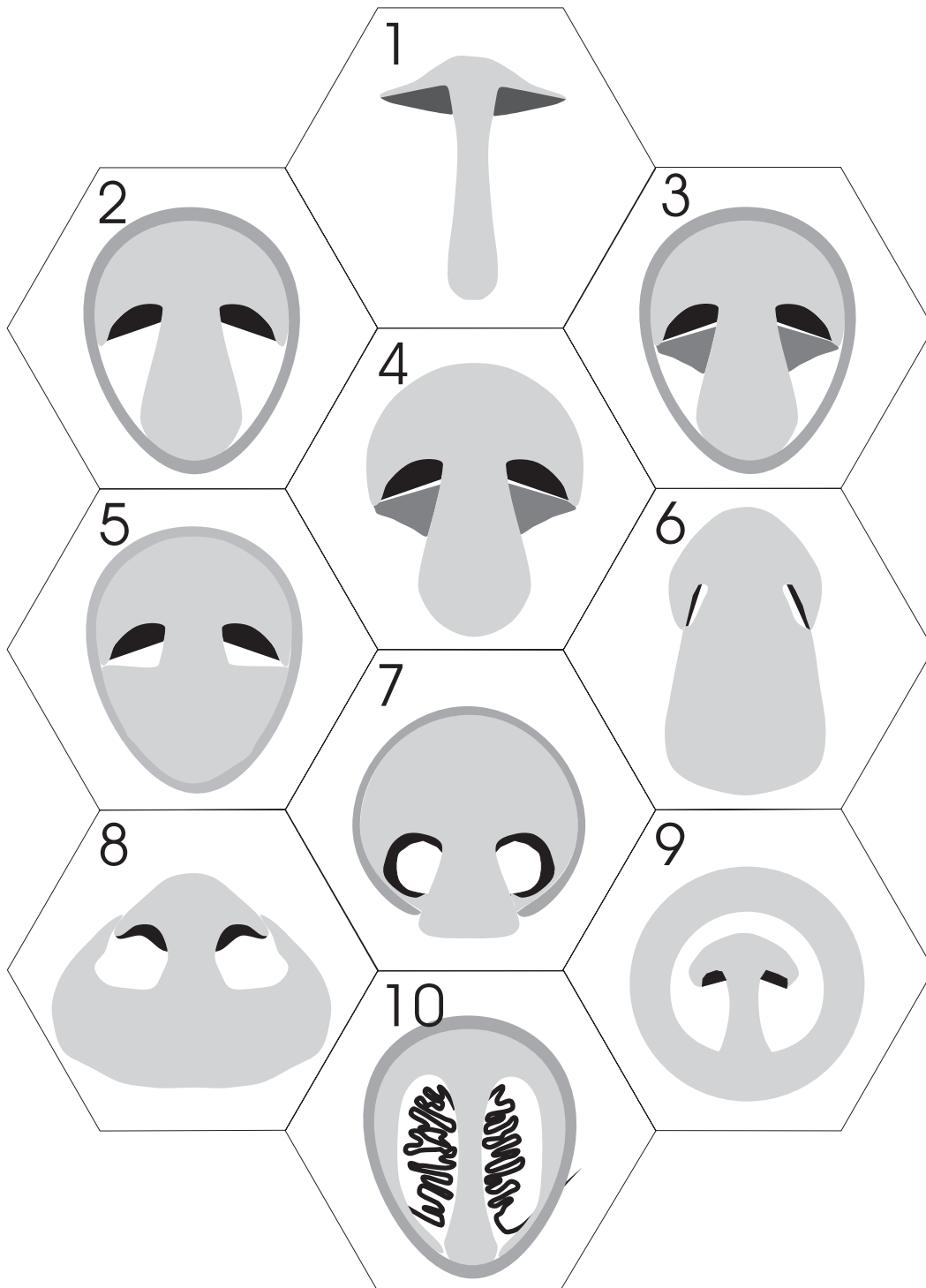


Ten ways to make a mushroom



A montage of diagrammatic sections illustrating the various primordial tissue patterns which eventually mature to form mushroom-like fruit bodies (basidiomata); hymenial tissues are shown in black (redrawn after Watling & Moore, 1994).

- 1 = gymnocarpic, where the hymenium is naked at first appearance and develops to maturity on the fruit body surface;
- 2 = monovelangiocarpic, with a single (universal) veil enveloping the whole primordium;
- 3 = bivelangiocarpic, in which an inner (partial) veil provides additional protection to the hymenium;
- 4 = paravelangiocarpic, where the veil is reduced and often lost at maturity;
- 5 = metavelangiocarpic, where a union of secondary tissues emerging from the cap and/or stem forms an analogue of the universal veil;
- 6 = gymnovelangiocarpic, in which the hymenium is protected by a very reduced veil, seen only at adolescence, formed between the stem and the closely applied cap;
- 7 = pilangiocarpic, the hymenium is protected by tissue extending downwards from the margin of the cap;
- 8 = stipitangiocarpic, the hymenium is protected by tissue extending upwards from the stem base, but this does not enclose the primordium;
- 9 = bulbangiocarpic, where the tissue protecting the hymenium is largely derived from the basal bulb of the stem and initially completely encloses the primordium;
- 10 = endocarpic, where the mature hymenium is enclosed or covered over, just one (the pileate type) of a number of patterns of this gasteromycetous form of fruit body is shown; in others the hymenial tissue may be expanded at the cost of the structural tissue, to occupy most of the internal volume.