

## Spore Drop

Cut off mushroom stems just below the cap. Select an area where the “Spore Drop” experiment can be left undisturbed for 24 hours. Provide each individual or small group with a mushroom cap, sheet of paper and dome. Review the Fungi Fun Math (see questions below).

1. Place mushroom cap, gill side down, on white sheet of paper or paper towel.
2. Cover the cap with a dome, leave undisturbed for approximately 24 hours.
3. Carefully remove dome and mushroom cap.
4. Observe spores with a hand-lens. To preserve the spore pattern, spray it with hair spray or cover with clear, self-adhesive contact paper. *Note: Do not spray the pattern if you plan to observe the spores under a microscope.* Observe spores through a microscope, *if desired*. Discuss the spore pattern art. Are all patterns the same? Can you see each spore?

**Fungi Fun Math**—Did you know a mature mushroom can produce 2 billion spores in 4 days?

1. How many hours does it take for a mushroom to produce 2 billion spores? (*96 hours*)
2. How many spores can a mushroom produce in a day (24 hours)? (*500 million*)
3. How long would it take to produce 1 billion spores? (*2 days or 48 hours*)
4. What is the diameter of your mushroom cap? (*Hint: The diameter is the length of a straight line passing through the center of a circle or sphere, from one side to the other side.*)
5. What is the radius of your mushroom cap? (*Hint: The radius is the length of a straight line extending from the center to the outside or periphery of a circle or sphere.*)

