"Magic" Screen

The Aim:

To show that water will not drip through fabric, even though the fabric is not water-proofed, because water likes to stick together

What you will need:

- 1 15 cm x 15 cm piece of needle-point/cross-stitch fabric
- 1 mason jar (The lid should have 2 parts. The inner part of the lid is not needed, but the screw-on ring is.)
- water
- water table
- water jug (for pouring)

What to do:

1. Put the fabric over the mason jar and screw the ring down over it so that it is secured.
2. Pour water right through the cloth into the jar, filling the jar 2/3 full with water.
3. Over the water table or bucket, quickly invert the jar.
4. Encourage observations at this point. Allow the students to press a finger into the fabric and make further observations.

When the fabric is touched this provides an exit for the water, and breaks the surface tension causing a leak. This is why we are told not to touch a wet canvas tent; once touched the spot will continue to leak.

Water will not flow out of this fabric when the jar is inverted because tiny holes in the fabric get filled with water. The water in these holes acts as a skin keeping the water inside the fabric.
You may also try this with construction paper. Invert the glass, holding onto the paper, and when you let go the paper will stay in place and the water will not spill out.