

SFU SCIENCE IN ACTION

NO LEAK SANDWICH BAG

In this experiment, try to see how many skewers and pencils you can insert into a sandwich bag before losing any water!

Allergy risks and safety:

Be careful with any sharp skewers and pencils that are used

Sandwich bag

Water

Several skewers or pencil crayons

Tray

A responsible adult

Procedure:

- 1. Fill a sandwich bag at least half full with water
- 2. Holding the bag over a tray, try inserting as many skewers as you can using the sharp end to poke through both sides of the bag
- 3. How many are you able to insert before you start losing water?
- 4. Try using sharpened pencil crayons
- 5. How many pencil crayons can you insert?

What happened?

Sandwich bags are made from flexible polymers which are long strands of molecules. When a skewer or pencil is pushed into the bag, these polymers are pushed apart and also squeeze back onto the skewer or pencil creating a seal!