

STEPPING INTO SCIENCE

SCIENCE KIT



THAMES & KOSMOS



>>> KIT CONTENTS



Checklist: Find – Inspect – Check off

✓ No.	Description	Quantity	Item No.	✓ No.	Description	Quantity	Item No.
<input type="radio"/>	1 Paper sheets (1 sheet for cutting and 2 sheets for airplanes)	1	703 545 705 710 705 711	<input type="radio"/>	15 Paper bag	3	700 083
<input type="radio"/>	2 Die-cut cardboard	1	715 738	<input type="radio"/>	16 Paper clip	2	020 040
<input type="radio"/>	3 Garden cress seeds	1	705 133	<input type="radio"/>	17 Suction cup	1	700 181
<input type="radio"/>	4 Plastic dish (2 halves)	1	702 184	<input type="radio"/>	18 Blotting paper	1	000 569
<input type="radio"/>	5 Magnifying glass	1	311 137	<input type="radio"/>	19 Soap bubble ring	1	000 583
<input type="radio"/>	6 Flexible straw	2	705 249	<input type="radio"/>	20 Modeling clay	1	000 588
<input type="radio"/>	7 Straw	6	707 779	<input type="radio"/>	21 Wool thread	1	702 751
<input type="radio"/>	8 Clay pot	1	121 816	<input type="radio"/>	22 Small polystyrene soap boat	1	700 633
<input type="radio"/>	9 Plastic bag	1	703 547	<input type="radio"/>	23 Pipette	2	232 134
<input type="radio"/>	10 Disk/Spinning top	1	703 548	<input type="radio"/>	24 Measuring cup	2	061 150
<input type="radio"/>	11 Sundial	1	259 181	<input type="radio"/>	25 Measuring cup lid	2	061 160
<input type="radio"/>	12 Plastic stick	1	700 401	<input type="radio"/>	26 Round filter paper	12	702 842
<input type="radio"/>	13 Rubber band	5	161 412	<input type="radio"/>	27 Polystyrene air-cushion boat and polystyrene disk	1	700 088
<input type="radio"/>	14 Polystyrene ball	1	700 080	<input type="radio"/>	28 Funnel	1	700 364

Any materials not included in the kit are marked with this symbol **+** under the "You will need" heading.

>>> Please do a preliminary review of the parts list and check to make sure that all of the correct materials are included in the kit.

>>> If you are missing any parts, please contact Thames & Kosmos customer service.

You will also need: Paper towels, water, toy block, plant parts, trowel, scissors, potted plant, string, confetti or tiny paper pieces, wool cloth, glue, glass bowl, sugar, soap flakes or bar of soap, drinking glass, soup bowl, saucer, ballpoint pens, markers, crayons, vegetable oil, ink, white paper, desk pad or blotter, small pieces of paper, teaspoon, tablespoon, pepper, salt, dish detergent

EXPERIMENT 4

Plants also sweat

YOU WILL NEED

- + Houseplant
- + String



Continue to experiment! Repeat the experiment in the garden, for example with a leaf or branch from a hedge or bush. The leaf of a sunflower also works well for this experiment.



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Be sure not to break any parts of the plant.

WHAT'S HAPPENING?

After some time the bag will fog up. Small water droplets will form. Depending on the time of year and the plant, this can take up to a couple of hours.

People and animals aren't the only living things that sweat: plants sweat too! With their roots, they absorb water from the soil. They expel the excess water into the air. This happens through tiny openings on the underside of the leaves. The plant needs the water to transport and distribute nourishment to the entire plant.

EXPERIMENT 21

The string pipe

YOU WILL NEED

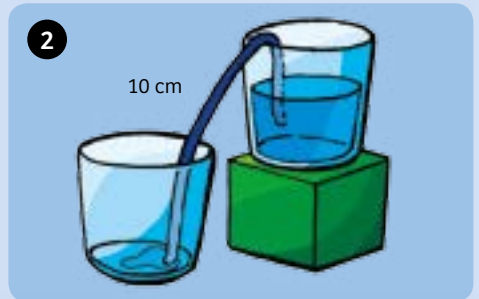
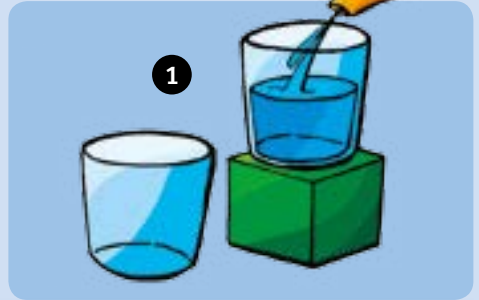


- + Building block
- + Scissors
- + Water



WHAT'S HAPPENING?

After a little while, water slowly flows through the string from the full cup into the empty cup. Between the string's fibers there is air, like in a sponge. These spaces fill up with water. When the string has filled entirely, water begins to drip out of its lower end. As additional water flows in from above, the small water pipe continues to run.



Continue to experiment!
You can use the water pipe to supply water to your flowers in the windowsill. Find out what happens if the measuring cup and flower pot are at the same elevation.

Make sure that the water cup is always higher than the flowerpot.