

materials

Left out in the weather



Lesson at a glance

Hold up a dry leaf and a scrap of paper and ask what Irish rain, sun and wind might do to them. Name five samples—paper, cloth, shiny silver wrap, a leaf and chalk—then assign two per pupil for partner talk. Pupils write or draw an I think mark for both samples on the Investigation Journal page before coats go on. A few helpers place one class tray outdoors; back inside, everyone adds a day-one look beside their prediction.

Learning objectives

- Predict how Irish weather might change materials left outside
- Set up samples safely outdoors and record first observations for later checking

Before the bell – prep

Day before: cut one class set—paper square, fabric scrap, foil piece, dry leaf, chalk stick—and choose a fixed outdoor spot (tray or net bag by a classroom door or porch edge). Optional: identical indoor compare set. Mark the spot so you can revisit in a few days.

Materials

Item	Qty	Per	Source	Low-cost substitute
paper squares	2	class	classroom	scrap from an old workbook page
fabric scraps	2	class	classroom	old sock or tea-towel offcut from home
aluminium foil pieces	2	class	supermarket	clean foil from a sandwich wrap
dry leaves	2	class	outdoors	fallen leaf from the school garden
chalk sticks	2	class	classroom	a small stick of playground chalk
shallow tray or net bag for outdoor samples	1	class	classroom	old plastic lunchbox lid weighted with a stone
Investigation Journal page	1	pupil	provided printable	plain paper with predict and observe headings said aloud by the teacher



Safety watch-point

Stay together with clear yard boundaries. No tasting or picking plants. Wash hands on return; wipe damp trays.



Teaching moves

- **Getting Started:** Hold only the leaf and paper (or a photo of peeling paint). Ask what rain, wind or sun might do—take two or three quick answers. Keep the full kit off the table so the wonder question stays sharp.
- **What can weather do to materials?:** Hold up each of the five samples as you name it so every word is tied to an object. Put weather and prediction on the board; say weathering lightly with one yard example and leave it. Head off the idea that only big storms change things.
- **What do we think will happen?:** Model one worked cycle aloud on paper (I wonder → I predict → I will check → I will record). Assign two samples per pupil or pair, name them aloud, then partner talk on one sample with a why prompt. Capture both I think marks on the Investigation Journal before anyone leaves the room.
- **Set up our weather watch:** Lead the class out together. Two or three helpers carry and set the tray; everyone else stays with the group and says one day-one notice only. No journals outside. If it is wild, place the tray under a porch edge where weather still reaches it lightly.
- **Record our day-one look:** Write the stems Today it looks... and Today it feels... on the board. Coach the split: I think stays as prediction; I see today is dry, shiny, hard, smooth. Each pupil records only their two samples; pool the rest aloud. Scribe a word where needed.
- **Before we check again:** Display-only talk: which sample will weather change most, and why? Ask why all samples share one spot and what you will compare later. Revoice ideas without scoring—this is still day-one thinking, not results.



What it should show

Today is set-up and baseline only—no weathering change yet. Expect dry, intact samples: paper flat, foil shiny, chalk hard, leaf dry, cloth as-is. Typical predictions name paper, chalk or leaf as changing fastest in rain. A surprising day-one look usually means a damp leaf or already-crumbled chalk went out; swap for a fresh dry piece and re-record.



Misconceptions & interventions

- **Only big storms change things outside—gentle rain and everyday sun do nothing.** — Point to faded chalk marks on the yard or peeling paint on a shed. Say everyday Irish weather changes materials slowly, which is why the class will check again in a few days.
- **Pupils write what they hope or already see under I think, mixing prediction with observation.** — Point to the two stems on the board. Say I think is before we check; Today it looks is what eyes and fingers tell us now—keep them in separate places on the journal page.
- **All five materials will change the same way, or foil cannot change at all.** — Hold paper beside foil and ask which feels thinner and more soakable. Accept foil may crumple or stay shiny longer; the later check will show, not today's talk.

Differentiation

Emerging	Developing	Proficient
• Scribe the I think and Today it looks stems while the pupil draws the two assigned samples. • Pair at the teacher table and talk one sample only before the second mark.	• After both marks, add one why under the sample they think will change most. • Pool one extra sample aloud using the class prediction board.	• Optional stretch: day-one look for a third sample, still on the same journal page. • Ask why one shared outdoor spot matters for a fair later compare.

Cross-curricular hook

Link to Geography weather—name today's Irish conditions (rain, wind, sun, cold) before the tray goes out.