

# Our senses help us investigate

## Lesson at a glance

Open with eyes closed so pupils notice classroom sounds and feels, then label eyes, ears, nose, hands and mouth on the diagram-labeller interactive. Hold up a covered three-piece kit and have each child write or draw one quick guess on the Investigation Journal page. Groups investigate their own feely-bag, sound jar and smell pot one sense at a time, jotting science words after each turn. Close by choosing which sense helped most and sharing one careful observation aloud.

## Learning objectives

- Use one sense at a time to make a careful observation
- Record an observation in science words
- Say which sense gave the most useful information

## Before the bell – prep

Day before: build one covered three-piece kit per group (about six) — opaque feely-bag, lidded sound jar, smell pot with cotton wool — and vary safe contents across groups. Check smell allergies and skip any scent a child cannot manage. Print Investigation Journal pages; keep all kits covered off tables until the explore step.

**Materials**

| Item                                                                                                                            | Qty | Per   | Source             | Low-cost substitute                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------|-----|-------|--------------------|-------------------------------------------------------------------------------------|
| opaque feely-bag with one safe mystery object (for example cotton wool, pebble, pine cone, spoon, fabric scrap or wooden block) | 1   | group | classroom          | a clean sock with the object inside, tied shut                                      |
| sound jar with tight lid and dry contents (for example rice, paper clips, dried beans, small bell, crumpled foil or pasta)      | 1   | group | classroom          | a clean yoghurt pot with a lid and a few dry pasta shapes                           |
| smell pot with cotton wool and a mild everyday scent (lemon zest, mint, coffee, vanilla, soap or orange peel)                   | 1   | group | supermarket        | a paper cup with a cotton pad and a tiny dab of clean scented soap                  |
| spare feely-bag for the teacher model                                                                                           | 1   | class | classroom          | use one group bag briefly for the model, then return it                             |
| Investigation Journal page                                                                                                      | 1   | pupil | provided printable | plain paper with a visible prediction/guess space plus three sense-observation rows |
| cover cloths or a side-table box to keep kits out of reach until the explore step                                               | 1   | class | classroom          | keep kits in a cupboard or tray stack until step 4                                  |

**Safety watch-point**

Check smell-pot allergies before the lesson; short sniffs only; no tasting; lids stay on sound jars; wash or wipe hands after the explore.

## Teaching moves

- **Body parts that help us sense:** Drive the diagram-labeller on the IWB in explore mode. Invite pairs to call where each label goes, then link eyes-seeing, ears-hearing, nose-smelling, hands-touching, mouth-tasting. Say clearly: today touch, hearing and smell only — no tasting.
- **What will each sense tell us?:** Hand out the Investigation Journal page first. Hold up one covered kit set so every child can see the three pieces without opening them. Model one minute with the spare feely-bag: predict soft, then think aloud soft, squashy, a little warm. Pupils write or draw one guess and leave it on the page.
- **Scientist senses at our tables:** Place one kit set on each table only now. Call the three turns aloud together — touch first, then hearing, then smell. Circulate coaching science words; if a group names the object too fast, ask what that sense actually told them. Thirty seconds after each turn to jot words on the journal page.
- **Record careful observations:** Give about seven minutes to finish one touch, one hearing and one smell row. Point to the board word bank and the starters My hands/ears/nose noticed... Allow a labelled drawing plus a scribed phrase for less confident writers. Calm pack: lids on, bags closed, hands washed.
- **Which sense helped most?:** Model the stem once (e.g. Hearing helps most for the school bell). One minute at tables, then gather two or three strong observation sentences and usefulness answers. Keep talk on quality of noticing, not who guessed the object first.

## What it should show

Pupils should produce sense-by-sense descriptions (smooth, squashy, rattly, lemony) rather than only object names, with the earlier guess still visible on the page. Touch usually wins for texture and shape, hearing for hidden shakers, smell for scent pots. A group stuck on names only needs the prompt: what did your hands or ears notice before you guessed?

## Misconceptions & interventions

- **I already know it's a sock — I'm done.** — Praise the description, not the name. Hold the bag and model: soft, squashy, a little warm — we care more about what the sense told you than the guess.
- **Sight is always the best sense for investigating.** — Point back to the covered kits: sight was held back on purpose. Ask which sense actually gave useful words for the bag, the jar and the pot.
- **I should smell hard or open the jar to check what's inside.** — Stop and restate the rules: short gentle sniffs, lids stay on, you tighten any loose lid — children do not tip contents out.



### Lesson 3

#### Differentiation

| Emerging                                                                                                                                                                                                                                                                                    | Developing                                                                                                                                                                                                                                                                       | Proficient                                                                                                                                                                                                                                                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>• Pair at the teacher table; child draws the feature noticed and labels with one or two board words while you scribe the sentence starter.</li><li>• Offer only the touch bag first, then add hearing once one careful observation is down.</li></ul> | <ul style="list-style-type: none"><li>• After each turn, prompt one extra science word from the board bank (e.g. bumpy as well as rough).</li><li>• Ask why their first guess matched or differed from what the sense told them — still without rubbing the guess out.</li></ul> | <ul style="list-style-type: none"><li>• Challenge them to say which sense would help least for one kit and why, using the same science words.</li><li>• Invite a cross-kit compare: how was careful observation for smell different from touch?</li></ul> |

#### Cross-curricular hook

Link to English oral language — build and reuse the shared science-word bank (smooth, rattly, lemony) in full sentences.

