

materials

Changing materials: squash, bend, tear, stretch

Lesson at a glance

Hold up one soft ball of play-dough and ask whether hands alone can change how it looks. Mime squash on the dough, then bend, tear and stretch, with the class copying. Pupils move to trays and try all four actions on dough, paper, wire and an elastic band, hunting for one thing that will not change. In partner talk they name one change and say what stayed the same and what is different, then match pot and card examples to squash, bend or tear.

Learning objectives

- Change a material by squashing, bending, tearing or stretching
- Name the change they made to a material
- Notice one thing that stayed the same and one thing that is different

Before the bell – prep

Night before: portion one tray per child or pair with a small dough ball, paper strips, a short pipe-cleaner or soft wire, and one elastic band. Seal spare dough. Gather a small clay pot and a folded card for the close. Set a pot for bands and a recycling tub for scraps.

Materials

Item	Qty	Per	Source	Low-cost substitute
play-dough (small ball)	1	pupil	classroom	soft modelling clay or homemade salt dough
soft craft wire or pipe cleaners (short lengths, about 15 cm)	1	pupil	classroom	pipe cleaners only, or thin twist-ties with ends covered in tape
scrap paper strips	3	pupil	classroom	old newspaper or used drawing paper
wide elastic band	1	pupil	classroom	hair bobble or short strip of stretchy fabric
tray or work mat for materials	1	group	classroom	large sheet of newspaper as a work mat
small clay pot or mug (or a simple photo of a pot)	1	class	classroom	any ceramic cup or plant pot already in school
folded birthday card or paper booklet	1	class	classroom	any folded paper card or reading book already in the room

**Safety watch-point**

Elastic bands stay unstretched when moving—no flicking at faces. Soft wire pieces stay on trays. Wash hands after play-dough; paper scraps to recycling.

**Teaching moves**

- **Getting Started:** Hold one unworked dough ball high. Take two or three ideas only (squash, roll, poke). Do not open trays yet. Keep the key question light: can we change a material just with our hands?
- **Four ways to change:** Press the dough flat slowly with both palms while saying squash. Ask what looks different and whether it is still dough. Mime bend, tear and stretch one at a time; children copy. No board glossary—station words only.
- **Changing trays:** Twelve minutes, hands only, no naming prompts. Watch who tears paper, who sees the band spring back, who is surprised—those are your step-4 voices. Give a one-minute warning before hands out.
- **What stayed the same?:** Each child picks one changed object only; trays stay put; bands held still. Stem one at a time: name the change, then what stayed the same, then what is different. Revoice three or four pairs into clear same/different sentences.
- **Who changes materials?:** Show the pot first, then the card. Ask which change the pot needed (squash and/or bend). Keep job names to one word after they see the object. Talk only—nothing typed.
- **Tidy and remember:** Lead calm pack-away: bands in a pot, wire collected, scraps to recycling, dough sealed. Hands washed. Exit: mime one change and name it as they line up.

**What it should show**

Most pupils will squash dough flat, bend wire, tear paper into pieces, and stretch the band. They typically notice paper and dough stay the same kind of stuff but change shape or number of pieces. Many are surprised the band springs back—affirm that some changes stay and some return. Redirect 'it turned into something else' back to still-dough / still-paper.

**Misconceptions & interventions**

- **'I changed it, so it's not play-dough any more—it's a pancake now.'** — Point at the flattened piece: 'Is it still soft dough when we touch it? Yes—only the shape changed, not the kind of material.'
- **'Tear means it's broken and ruined, so we shouldn't do it.'** — Hold the torn strip beside the card: 'Card-makers tear and fold paper on purpose so the card works. Careful tearing is a useful change.'
- **Vague talk: 'It just changed.'** — Point to the object in their hand: 'Is it still paper? How many pieces do you have now?' Supply squash, bend, tear or stretch if they need the word.





Differentiation

Emerging	Developing	Proficient
• Stay at the teacher tray and practise one action (squash the dough) with the word said aloud before trying a second material. • Accept pointing plus a single action word; teacher revoices the same/different sentence.	• After naming their change, prompt one same and one different about the object still in hand. • Invite them to find the material that would not stay changed (the band).	• Ask which change was hard to undo and why the band came back. • Link their bent wire or torn paper to the pot or card: which everyday object needed a similar change?

Cross-curricular hook

Pairs with Aistear/play and oral language: partner stems ‘I squashed...’ and ‘It is still... but now...’.