

materials

Squashing and bending: things change!



Lesson at a glance

Hold up one smooth play-dough ball and ask what a big push might do — take two or three guesses without flattening it yet. Model one full cycle aloud (wonder, push, notice the pancake, name the change), then every child explores their own set of dough, foil, paper and a bendy stick at their table. Freeze-and-show moments name squash, roll or bend. Carpet share and a short make-sense talk close: pushing soft things can change how they look; the material is still there.

Learning objectives

- Change the shape of play-dough or soft material by squashing, rolling or bending
- Say that pushing can change how a material looks

Before the bell – prep

Portion one small play-dough ball, one foil scrap, one paper scrap and one or two pipe cleaners per child at each place before the bell. Optional shallow trays keep sets tidy. Seal leftover dough so it does not dry out.

Materials

Item	Qty	Per	Source	Low-cost substitute
play-dough (ready-made tub)	1	pupil	supermarket	home-made salt dough (flour, salt and water mixed the day before)
aluminium foil pieces (about A5 size)	1	pupil	supermarket	clean foil from a used food tray, washed and dried
scrap paper sheets	1	pupil	classroom	used drawing paper or newspaper squares
pipe cleaners	2	pupil	classroom	strips of soft card or thick wool lengths for bending
shallow trays to hold each child's materials at the table	1	pupil	classroom	lids of cardboard boxes, clean baking trays, or materials set directly on the table

**Safety watch-point**

Materials stay out of mouths. Pipe-cleaner ends point away from faces. Wipe dough crumbs; children wash hands after play.

**Teaching moves**

- **Getting Started:** Hold one smooth ball high so all can see. Ask 'What might happen if I give it a big push?' Take two or three guesses only — do not squash it yet. Keep the tone playful and curious.
- **Look and wonder:** Say the word change simply, then model one cycle: 'I wonder... I think it will go flat... I try' — press once with your palm — 'I noticed it is not a ball any more. Pushing changed how it looks.' Head off 'it broke' by naming it is still the same dough.
- **Squash, roll and bend:** Children stay seated with their own set. Launch the board line, then circulate. Use two or three freeze-and-show moments: call freeze, invite two children to hold up what changed and name squash, roll, bend or flatten, then resume. Look for hands pushing and children trying more than one material.
- **What changed?:** Carpet share with trays left at tables. Invite four or five children to hold one changed piece and say one short sentence. Revoice with change: 'You pushed it, and the shape changed.' Between shares, use thumbs-up or a whispered action word so the whole class stays folded in. Pointing is enough if talk is hard.
- **Make-sense talk:** When we push, squash or bend soft things, they can look different — that is change; the dough is still there. Weave in the bowl maker: someone pushed soft clay so we can use a bowl. Ask who made something flat or bent something, and whether it is still the same soft thing.

What it should show

Most will show a flat pancake or rolled sausage of play-dough; foil often stays scrunched; paper keeps creases; pipe cleaners hold a curve, zigzag or ring. Affirm that different soft things change in different ways. If a child says the dough is 'gone', hold the pancake and crumbs and name same dough, new shape.

Misconceptions & interventions

- **'It's gone' or 'it's broken' — the child thinks the material disappeared or is ruined when the shape changes.** — Hold the pancake and any leftover crumbs side by side: 'Same play-dough — only the shape changed.' Revoice: pushing changed how it looks.
- **A child only scrunches or only uses one material and does not notice shape change.** — Point to before-and-after on their piece: 'Was it flat/round before? What did your hands do? How does it look now?' Offer the single word squash on the dough if needed.



Differentiation

Emerging	Developing	Proficient
• Offer only the play-dough and one action word (squash); accept a point or gesture instead of a full sentence on the carpet.	• Prompt a second material or a second action (roll or bend) and ask ‘How does it look now?’	• Challenge a little bowl or snake and have them say what they pushed; invite them to notice that foil, paper and dough keep change in different ways.

Cross-curricular hook

Link to Art: hands push and shape soft clay or dough into simple bowls and forms we can use.