

The systems of the human body

Lesson at a glance

Open by asking what jobs the body is doing while pupils sit still, then introduce organ and body system with the heart as a job-not-place worked example. Groups sort ten organ cards onto five team mats (Breathing, Circulation, Digestion, Movement, Control), check disputed placements on the sorting-tree interactive, and lock three full teams plus two partials into the Investigation Journal. Close with five volunteers acting the teams in a running-in-the-yard hand-off chain so the class can name how systems depend on each other.

Learning objectives

- Group major organs by the body system they belong to and the job that system does
- Explain how at least two body systems depend on each other to keep a person healthy

Before the bell – prep

Print and pre-cut one organ-card set and five team-mat headers per group before the bell — cutting mid-lesson eats the sort. Stick to the team mats and leave the body silhouette out of it. Bag each group's cards for reuse, and reclaim the mats while the class is writing up the journal so they are ready for the front-row chain.

Materials

Item	Qty	Per	Source	Low-cost substitute
organ cut-out cards (lungs, windpipe, heart, blood vessels, stomach, intestines, bones, muscles, brain, nerves)	1	group	provided printable	write the ten organ names and job lines on sticky notes or scrap card
system team-mat header cards (Breathing, Circulation, Digestion, Movement, Control)	1	group	provided printable	five labelled sheets of plain paper or mini-whiteboards
Investigation Journal page	1	pupil	provided printable	blank A4 page ruled into five labelled team boxes
pencils or colouring pencils	1	pupil	classroom	any classroom writing or drawing tools
blank scrap card or sticky notes for challenge organs	3	group	classroom	spare paper torn into slips



Safety watch-point

Pre-cut cards yourself or with an adult helper — no pupil scissors needed. Keep the five front volunteers standing clear of furniture during the chain.

Teaching moves

- **Getting Started:** Keep it light: collect three or four named jobs (breathing, heart beating, digesting lunch, thinking, moving) and affirm them. Do not hand out cards or name the five systems yet. End on the key question: if the body has so many jobs, how does it organise them?
- **Body systems are teams:** Project only the two definitions and the heart worked example. Hold up the heart card and think aloud: we sort by pumping blood, not by sitting near the lungs. Put the card back — do not place it on a mat yet. Say the job-not-place rule aloud before the sort.
- **Sort the organ teams:** Name the five teams as you hand out mats, then model the first placement: heart → Circulation because it pumps blood. Circulate and, if a group parks the heart with Breathing for chest position, ask ‘What job does the heart actually do?’ and send them back to the card’s job sentence.
- **Check our sorts on the board:** Drive the sorting-tree interactive in explore mode on the IWB — pupils stay device-free. Work disputed cards first (heart is the classic). After each placement, ask a different pair: ‘Do you agree? What job sentence proves it?’ Table mats that disagree may move one card and say what changed their mind.
- **Draw the system teams:** Frame the Investigation Journal as locking in the agreed sort, not redrawing from scratch. Default product: three fully labelled teams (name, big job, organs) plus the other two named with at least one organ. Steer away from body outlines. As soon as a group has three full teams, reclaim their mats for the front row.
- **Pass the job along:** Line the five reclaimed mats at the front with one volunteer per team. Read the hand-off rule off the board with the class first: the acting volunteer says what their team is doing, then points to whoever goes next. Feed each volunteer their line as their turn comes, in this order: Control (“the brain tells the legs to run, and tells Breathing and the heart to speed up”) → Breathing (“I take in extra oxygen”) → Circulation (“I carry that oxygen in the blood to the muscles, and nutrients too”). At that point Digestion steps forward to say it broke the food down before the run, and then the chain finishes with Movement (“my muscles use the oxygen and the nutrients”). Seated pupils call which team they think goes next BEFORE each hand-off; that is their job, so do not put the order on the board. Before time is up, cold-call seated pairs for at least two concrete two-system dependence statements — naming the next team alone is not enough.



What it should show

Correct sort: Breathing — lungs, windpipe; Circulation — heart, blood vessels; Digestion — stomach, intestines; Movement — bones, muscles; Control — brain, nerves. Journal pages show three full teams with a short job line plus two partials. Dependence talk should sound like ‘muscles need oxygen from Breathing and blood from Circulation’ or ‘Movement needs nutrients Digestion put into the blood’. A heart-on-Breathing mat is almost always the place-not-job error — re-read the card’s job sentence.

Misconceptions & interventions

- **Pupils put the heart with Breathing because ‘it’s in the chest near the lungs’.** — Hold the heart card and ask ‘What job does this card say?’ Revoice: we sort by the pumping job, so Circulation — neighbours in the chest do not make a team.
- **Pupils treat each system as working alone: ‘Breathing just breathes; Movement just moves.’** — After the running chain, ask ‘What happens to Movement if Breathing cannot bring in enough oxygen?’ Draw out that muscles stall without oxygen and blood delivery.
- **Pupils justify a sort with a body map (‘tummy things go together’) instead of the job sentence.** — Point at the card text and the team-mat header. Ask them to read both aloud and match job to job before the card can stay.

Differentiation

Emerging	Developing	Proficient
• Start less confident groups with four cards only (lungs, heart, stomach, brain) and the matching four mats, then add the rest once the job-not-place pattern sticks. • Sit with one table and co-read each card’s job sentence before they place it.	• Once three full teams are recorded, prompt an arrow between two teams and a one-line ‘hands work to’ note on the journal page. • Cold-call a second dependence pair after the running chain (e.g. Digestion → Circulation).	• Offer a blank slip for one extra organ they know; accept liver → Digestion with a job justification, and park skin for later. • Ask them to critique a wrong mat placement from another group using only the job sentence as evidence.

Cross-curricular hook

Link to PE: after yard running, name which two systems handed oxygen and nutrients to the working muscles.