Movement

Answers

KS3 science quick questions

This topic online

Activate 1: Structure and function of body systems | Exploring Science 7C

Q	Answer	Remember
1	skeleton	Adults have about 206 bones working together as one system.
2	protection	The ribs do the same job for your heart and lungs.
3	support	Without bones you would flop like a jellyfish on a beach.
4	bone marrow	Marrow makes millions of new red blood cells every second.
5	femur	The femur is about a quarter of your height.
6	ribs	The rib cage also moves when you breathe in and out.
7	joint	Knees, elbows, hips and knuckles are all joints.
8	cartilage	Cartilage is also what gives your ears and the tip of your nose their shape.
9	ligament	Ligaments link bone to bone. Tendons link muscle to bone.
10	tendon	You can feel the big tendon at the back of your ankle above your heel.
11	contracts	Muscles can only pull, never push.
12	antagonistic	Antagonistic means working against each other, like a tug of war that takes turns.
13	biceps	Biceps bends the arm, triceps straightens it.
14	triceps	While the triceps contracts, the biceps relaxes.
15	hinge joint	Your shoulder is a ball and socket joint, so it can swing round in circles.
16	relaxes	In every antagonistic pair, one contracts while its partner relaxes.
17	15 Nm	300 × 0.05 = 15. Bones act as levers and joints act as pivots.
18	500 N	force = moment / distance, so 20 / 0.04 = 500. Muscles close to a joint must pull very hard.
19	no	A tendon passes the muscle's pull on to the bone. If it snaps, the pull goes nowhere.
20	Muscles can only pull, not push, so one muscle is needed to pull the bone each way.	One muscle bends the joint and the other straightens it again.

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