Name & Surname: _____ Class: _____ Date: _____

Move It!

Skeletons and muscles at work

About 30 minutes Level ★★★☆☆



Skeletons and muscles

Humans and many animals have a **skeleton** and muscles. The skeleton is made of over 200 **bones** joined together.

- Bones give **support** and hold the body up.
- Bones give **protection**. The skull guards the brain.
- Muscles and bones give **movement** at joints.
- Some animals have no **backbone**. Crabs have a hard skeleton outside.



Task A

Example done for you

/4

Read each sentence. Tick true or false.

Statement	True	False
Humans and some animals have skeletons and **muscles** for support.	✓	
The **skull** guards the brain.		
Ribs guard the **heart** and lungs.		
Muscles push bones to make them **move**.		
All animals have a **backbone** inside them.		

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My Moving Body

Find joints and **muscles** in your own body.

Key words

skeleton: all the bones joined together

bone: hard part that holds you up

muscle: soft part that pulls bones

joint: place where two bones meet

support: holding the body up

protection: keeping organs safe

Task B

Think about your own **body**. Draw and write in each box.

My moving body

Touch your elbow. Draw how it bends.

Draw your head. Circle the skull.

Draw your ribs. Show what they guard.

Draw your favourite move. Circle the muscles.

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Feel Muscles Pull

Test how two **muscles** move your elbow.

Did you know?

Did you know? Bones are **living** and can mend if they break.

Task C

/2

Try this partner test to feel muscles work in pairs.

Aim To feel how two muscles pull at the elbow.

You will need

- [ ] a chair

⚠ **Stay safe**

- sit safely on the chair
- move your arm slowly
- stop if it hurts

Method

1. Sit up straight with your arm by your side.
2. Slowly bend your elbow to bring your hand to your shoulder. Feel the front get hard.
3. Slowly straighten your arm again. Feel the back work.
4. Ask your partner to watch, then swap roles.
5. Bend and straighten five times. Compare front and back.

What I did	Front of arm felt	Back of arm felt

1. Which **muscle** pulls to bend the elbow?

.....

.....

2. Why do we need two **muscles** at the elbow?

.....

.....

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Think Like Scientists

Use clues to work out how **bodies** move.

Task D

/2

Read the text. Answer about skeletons and muscles.

A student watches two animals. A dog runs on four legs and sits up straight. A crab walks sideways. It has a hard cover on the outside. The student bends an elbow and feels the front of the arm get hard.

Question	It says...	I say...	And so...
Does the dog use **muscles** to move?	The dog runs and sits up.	Running and sitting need pulls on bones.	Yes, the dog uses muscles to move.
Is the crab **skeleton** inside like ours?			

Task E

/6

Climb the ladder. Answer about skeletons and muscles.

Remember Name the three jobs of the **skeleton**.

Understand Why can a **muscle** only pull, not push?

Apply What **muscles** work when you bend your elbow?

Analyse Compare the **dog** and crab skeletons.

Evaluate A student says we do not need a **skeleton**. Are they right?

Create Draw a **model** to show protection by the skull.

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Words and Choices

Unscramble words, then match each **job**.

Task F

Example done for you

/3

Unscramble each word about bones and muscles.

E K E O S T L N — All the bones give support

SKELETON

E C M L S U — It pulls bones to move

N J O T I — Two bones meet at the elbow

U L L K S — It guards the brain

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Move It!

Task G

/6

Pick the best example to show each job. Say why.

skull | backbone | elbow muscles

Person	Most suitable choice	Justification
a student showing support		....
a student showing protection		....
a student showing movement		....

How did I do?

Circle a face for each line.

I can name the three jobs of the skeleton. ☹ 😐 ☺

I can explain how muscles pull bones. ☹ 😐 ☺

I can sort animals with and without backbones. ☹ 😐 ☺

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Answer sheet: Move It!

Task A

1. True
2. True
3. True
4. False
5. False

Task B

Answers will vary.

Task C

1. The biceps.
2. Muscles only pull, so one pulls to bend and one pulls to straighten.

Task D

1. Yes, the dog uses muscles to move.
2. No, the crab has its skeleton outside.

Task E

1. Support, protection and movement.
2. It gets shorter to pull the bone.
3. Biceps pulls to bend, triceps relaxes.
4. Dog has bones inside, crab has hard cover outside.
5. No. We would flop and organs would not be safe.
6. Draw a hard shell round a soft brain and label it to show the skull guards the brain.

Task F

1. SKELETON
2. MUSCLE
3. JOINT
4. SKULL

Task G

a student showing support: backbone (Backbone holds the body upright.)
a student showing protection: skull (Skull is hard and guards the brain.)
a student showing movement: elbow muscles (Biceps and triceps pull both ways at the joint.)

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