Muscle Map

Locate major muscles using front and back views

HS-AP4-5 "Use a diagram, model, or dissection to identify major muscle groups."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB In the first two paragraphs, circle each muscle name, underline the words that locate it, and write F or B above its first mention to show which view you would use to label it.

Reading a Body Model

1. Imagine a transparent body model standing with its palms facing forward. This position makes the front and back easy to compare, even when the arms turn during movement. On the front, the deltoids cap the shoulders, while the pectoralis major muscles spread across the upper chest. The biceps brachii lie on the front of each upper arm, below the shoulder caps. The rectus abdominis runs down the center of the abdomen. Farther down, the quadriceps cover the front of each thigh. These muscles serve as landmarks, but they are not a complete list of the body's muscles.

2. Turn the same model so its back faces you. The trapezius forms a broad shape across the upper back and neck, reaching toward both shoulders. Below it, the latissimus dorsi muscles cover much of the middle and lower back on either side of the spine. The triceps brachii lie along the backs of the upper arms, opposite the biceps brachii. The gluteus maximus muscles make up much of the buttocks. Hamstrings run along the backs of the thighs, and the gastrocnemius muscles form the prominent bulges of the upper calves. A label belongs on the surface where its muscle lies.

3. A muscle's name alone does not tell you where to put its label on a model. First choose the view that shows the surface you need: the front or the back. Then find nearby landmarks, such as joints or body regions, to place the label more precisely. Check whether the label falls on an arm, the trunk, or a leg, and whether it points to the upper or lower part of that region. In a real dissection, tissues can overlap, so a label on a surface model points to a general location rather than tracing every muscle edge.

2 ANSWER WITH EVIDENCE

Use the passage

1. On a front-view model, a pin sits on the upper chest, not on the shoulder cap. Which muscle should its label identify?

2. On a back-view model, a label points to the broad area on either side of the spine below the upper back. Which muscle belongs there, rather than the one that reaches the neck?

3. A pin sits on the back of an upper arm. Which muscle belongs there, and which muscle occupies the opposite surface?

4. A pin on the front of a thigh has been labeled hamstrings. What label belongs there, and where should the hamstrings label go?

3 YOUR TURN

Your own words

Sketch simple front and back body outlines in the two panels. Place and label at least eight different muscles named in the passage, with at least three on each view and one pair on opposite sides of the same body region.

ANSWER KEY

Muscle Map

HIGH SCHOOL · HS-AP4-5

PART 1 · READ AND MARK

In the first two paragraphs, circle each muscle name, underline the words that locate it, and write F or B above its first mention to show which view you would use to label it. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	On a front-view model, a pin sits on the upper chest, not on the shoulder cap. Which muscle should its label identify?	**Pectoralis major.**
2	On a back-view model, a label points to the broad area on either side of the spine below the upper back. Which muscle belongs there, rather than the one that reaches the neck?	**Latissimus dorsi.**
3	A pin sits on the back of an upper arm. Which muscle belongs there, and which muscle occupies the opposite surface?	**Triceps brachii belongs on the back of the upper arm; biceps brachii is on the front.**
4	A pin on the front of a thigh has been labeled hamstrings. What label belongs there, and where should the hamstrings label go?	**Quadriceps belongs on the front of the thigh; hamstrings belongs on the back.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Front outline: deltoids on the shoulders, biceps brachii on the front upper arms, rectus abdominis on the center of the abdomen, and quadriceps on the front thighs. Back outline: trapezius across the upper back and neck, triceps brachii on the back upper arms, gluteus maximus on the buttocks, hamstrings on the back thighs, and gastrocnemius on the upper calves. Biceps brachii and triceps brachii form the opposite-side pair.

Accept labels placed in the correct general regions, even if the outlines are not anatomically detailed. For the opposite-side pair, accept biceps brachii and triceps brachii or quadriceps and hamstrings.